

# Exhibit 81

# J&J's Internal Documentation

## 1957-1967

Date	Organization	Ore/Product	Type
10/15/57	Battelle Memorial	Italian Source Talc	Amphibole
5/23/58	Battelle Memorial	Italian Source Talc	Tremolite x 30
7/18/58	Battelle Memorial	Italian Source Talc	Fibrous Amphibole and Tremolite
7/31/59	Battelle Memorial	Italian Source Talc	Tremolite x 63
8/31/59	Battelle Memorial	Italian Source Talc	Tremolite
9/15/59	Battelle Memorial	Italian Source Talc	Tremolite
12/31/59	Battelle Memorial	Italian Source Talc	Tremolite x 25
3/8/60	Battelle Memorial	Italian Source Talc	Tremolite x 7
3/8/60	Battelle Memorial	Off Shelf J&J Baby Powder	Tremolite
4/12/60	Battelle Memorial	Italian Source Talc	Tremolite x 20
6/6/61	Battelle Memorial	Hammondsburg, VT Talc	Altered Amphibole
10/13/61	Battelle Memorial	J&J Baby Powder Specification	Trace tremolite & amphiboles "usual contaminants"
5/27/63	Battelle Memorial	Vermont Talc	Amphibole
4/7/66	Battelle Memorial	Hammondsburg, VT Talc	Serpentine, Altered amphibole
7/13/66	JJ Memorandum	1910-1920 Era Baby Powder	Tremolite
7/13/66	JJ Memorandum	1920-1930 Era Baby Powder	Tremolite
1/30/67	JJ Memorandum	Competitor Product with Italian Talc	Fibrous tremolite

# J&J's Internal Documentation

## 1968-1972

Date	Organization	Ore/Product	Type
1/24/68	Battelle Memorial	Italian Source Talc	Tremolite
5/10/71	Colorado School of Mines	Johnson's Baby Powder	Tremolite needles
7/7/71	Colorado School of Mines	Vermont Production Samples	Tremolite/Actinolite x 6
7/9/71	Dr. Langer-Mt. Sinai	Johnson's Baby Powder	Chrysotile
7/23/71	Colorado School of Mines	Vermont Talc	Amphiboles
8/6/71	Johnson & Johnson	Italian Talc	Tremolite, Actinolite & Chrysotile
8/9/71	Johnson & Johnson	Johnson's Baby Powder	fines implicated in asbestos toxicology
9/3/71	McCrone	Johnson's Medicated Powder	Chrysotile
11/10/71	Dr. Langer-Mt. Sinai	Johnson's Baby Powder	Chrysotile
2/72	Turin Polytechnic	Italian Source Talc	Tremolite
9/8/72	Prof. Pooley-Cardiff	Italian Source Talc	Tremolite
10/27/72	McCrone	Johnson's Baby Powder "108T"	Tremolite
10/27/72	McCrone	Johnson's Baby Powder "108T"	Tremolite
1972	Johnson & Johnson	Johnson's Baby Powder	Tremolite
1972	Minnesota Space Center	Shower to Shower/ Lewin Shower/Shower	Chrysotile x 2

# J&J's Internal Documentation

## 1973-1974

Date	Organization	Ore/Product	Type
4/19/73	Johnson & Johnson	Johnson's Baby Powder	Tremolite Fibers x 4
4/27/73	Johnson & Johnson	Johnson's Baby Powder (further analysis)	Actinolite Rods
5/16/73	Prof. Pooley - Cardiff	Vermont Source Talc	Tremolite type asbestos
6/4/73	Prof. Pooley-Cardiff	Vermont Talc	Tremolite
10/29/73	Johns Manville	Italian Source Talc	Tremolite
10/29/73	Johns Manville	Johnson's Baby Powder	Chrysotile
9/13/73	Prof. Pooley-Cardiff	Vermont Talc	Actinolite
9/13/73	Prof. Pooley-Cardiff	Italian Talc	Tremolite
12/13/73	Dutch Consumer Organization	Johnson's Baby Powder	Asbestos
1974	Pooley/Langer	Italian Source Talc	Tremolite & Possible Anthophyllite
3/1974	Dartmouth-Professor Reynolds	Vermont Source Talc	Fiberform actinolite and anthophyllite
5/14/74	Windsor Minerals/JJ	Vermont Source Talc	Chrysotile x 4
5/14/74	Windsor Minerals/JJ	Vermont Source Talc	Fibrous Anthophyllite

# J&J's Internal Documentation

## 1974-1975

Date	Organization	Ore/Product	Type
4/4/74	Johnson & Johnson	Vermont Source Talc	Fibrous Tremolite
4/4/74	Johnson & Johnson	Vermont Source Talc	Fibrous Chrysotile
4/24/74	McCrone	Vermont-Argonaut	Chrysotile x 15
4/24/74	McCrone	Vermont-Argonaut	Asbestiform Amphibole x 15
5/9/74	McCrone	Vermont-Argonaut Ore	Chrysotile asbestos contamination
5/9/74	McCrone	Vermont-Argonaut Product	Chrysotile asbestos contamination
7/8/74	McCrone	Vermont-Weekly Samples	Chrysotile x 5
7/8/74	McCrone	Vermont-Weekly Samples	Tremolite fiber
1974	Societá Talco e Grafite Val Chisone	Italian Source Talc	Chrysotile
7/1/75	McCrone	Vermont Source Talc	Asbestos x 9
11/5/75	McCrone	Vermont Source Talc	Asbestos x 13

# J&J's Internal Documentation

## 1975-2004

Date	Organization	Ore/Product	Type
11/19/75	McCrone	Vermont Source Talc	Asbestiform Amphiboles x 2
3/1976	Rubino, et al.	Italian Source Talc	Fibers of Tremolite
9/26/84	Paoletti, et al.	Italian Talc	Tremolite Asbestos x 7
9/26/84	Paoletti, et al.	Italian Talc	Chrysotile Asbestos x 1
1/30/87	Johnson & Johnson	Vermont Floated Talc	Amphiboles
1/30/87	Johnson & Johnson	Johnson's Baby Powder	Amphiboles
3/30/87	Johnson & Johnson	Vermont Floated Talc	Amphiboles
1990	McCrone	Vermont Talc	Anthophyllite Asbestos
1991	Alice Blount, Rutgers	Johnson's Baby Powder & Vermont Talc	Tremolite Asbestos
2/10/92	Alice Blount, Rutgers	Johnson's Baby Powder & Vermont Talc	Blount reiterates Asbestos findings
10/13/95	RJ Lee Group	Johnson's Baby Powder	Tremolite
4/23/98	Alice Blount, Rutgers	Johnson's Baby Powder & Vermont Talc	Blount reiterates Asbestos findings
1/5/04	Forensic Analytical Services	Johnson's Baby Powder	Anthophyllite Asbestos

# Exhibit 82

Page 1

1 SUPERIOR COURT OF NEW JERSEY  
2 LAW DIVISION: MIDDLESEX COUNTY  
3 DOCKET NO. MID-1809-17AS  
4 APPELLATE DOCKET NO. \_\_\_\_\_

5 DOUGLAS AND ROSLYN BARDEN, )  
6 v. ) TRIAL  
7 BRENNTAG NORTH AMERICA, et al., )  
8 Defendants. )  
9 DAVID CHARLES ETHERIDGE AND )  
10 DARLENE PASTORE ETHERIDGE, )  
11 v. )  
12 BRENNTAG NORTH AMERICA, et al., )  
13 Defendants. )  
14 D'ANGELA MCNEILL-GEORGE, )  
15 Plaintiff, )  
16 v. )  
17 BRENNTAG NORTH AMERICA, et al., )  
18 Defendants. )  
19 WILLIAM AND ELIZABETH RONNING, )  
20 Plaintiff, )  
21 v. )  
22 BRENNTAG NORTH AMERICA, et al., )  
23 Defendants.

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1		1 INDEX
2	Place: Middlesex County Courthouse 56 Paterson Street New Brunswick, New Jersey 08903	2 WITNESSES CROSS REDIRECT RECROSS
3		3
4		FOR THE PLAINTIFF:
5	Date: Wednesday, August 14, 2019 9:29 a.m. (Volume 1 of 2) (Pages 1 - 200)	4 5 JOHN HOPKINS 6 BY MS. SULLIVAN: 6 7 BY MR. PANATIER: 116
6		8
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11	BEFORE: HON. ANA C. VISCOMI, J.S.C. and JURY	13
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15		17
16		18
17	TRANSCRIPT ORDERED BY: MOSHE MAIMON, ESQ. LEVY KONIGSBERG	19
18		20
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21	ANDREA F. NOCKS, CCR, CRR PRIORITY ONE 290 West Mount Pleasant Avenue Livingston, New Jersey 07039 (718) 983-1234 E-mail: p1steno@veritext.com	23
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	Page 3	Page 5
1	APPEARANCES: CHRISTOPHER PLACITELLA, ESQ COHEN, PLACITELLA & ROTH 127 Maple Avenue Red Bank, New Jersey 07701 -and- MOSHE MAIMON, ESQ LEVY KONIGSBERG 800 3rd Avenue 11th Floor New York, New York 10022 -and- CHRIS J PANATIER, ESQ SIMON GREENSTONE PANATIER 1201 Elm Street Suite 3400 Dallas, Texas 75270 Attorneys for Plaintiffs, Douglas and Roslyn Barden, David Charles Etheridge and Darlene Pastore Etheridge, D'Angela McNeill-George, William and Elizabeth Ronning	1 INDEX 2 EXHIBITS 3 MARKED FOR EVIDENCE 4 NO DESCRIPTION PAGE 5 Plaintiff's Exhibit 1056 97 6 Plaintiff's Exhibit 2051 232 7 Plaintiff's Exhibit 3320 270 8 Plaintiff's Exhibit 3431 171 9 Plaintiff's Exhibit 3695-61 254 10 Plaintiff's Exhibit 6035 129 11 Defense Exhibit 7046, Tab 18 64 12 Defense Exhibit 7070, Tab 38 91 13 Defense Exhibit 7834 109 14 Defense Exhibit 8011, Tab 57 25 15 Defense Exhibit 8012, Tab 53 49 16 Defense Exhibit 8196, Tab 58 29 17 Defense Exhibit 8396, Tab 297 56 18 Defense Exhibit 8897, Tab 56 24
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2 (Pages 2 - 5)

<p>1       COURT OFFICER: Jury's entering. 2                     (Jury enters.) 3       THE COURT: Good morning. 4       Please be seated. I would ask everyone to 5 make sure their cell phones, other audible devices are 6 turned off. 7       So this is the continued trial in the matter 8 of Douglas and Roslyn Barden versus Johnson &amp; Johnson; 9 David and Darlene Etheridge versus Johnson &amp; Johnson; 10 D'Angela McNeill versus Johnson &amp; Johnson; and William 11 and Elizabeth Ronning versus Johnson &amp; Johnson. 12      Today is August 14, 2019. 13      May I have appearances, please, for the 14 plaintiffs. 15      MR. MAIMON: Thank you, your Honor. Good 16 morning. 17      Moshe Maimon, Chris Panatier and Chris 18 Placitella for the Bardens, the Ronnings, the 19 Etheridges and Miss McNeill. 20      THE COURT: Thank you. 21      On behalf of the defendants, Johnson &amp; 22 Johnson and Johnson &amp; Johnson Consumer Incorporated. 23      MS. SULLIVAN: Good morning, your Honor. Hi, 24 everyone. Good morning. 25      Diane Sullivan and Jack Nolan for J&amp;J.</p>	<p>Page 6</p> <p>1       Administration appeared to be satisfied, so the issue 2 was mostly put to bed. It was no longer a concern to 3 the FDA. They appeared to be satisfied. 4       Q. And did the FDA do their own testing and 5 analysis? 6       A. Amongst other activities in the 1970s, FDA 7 did extensive testing of their own. They had their 8 own laboratory do investigations. 9       Q. And our jurors have seen some of the test 10 results, but what was the FDA's conclusion on the 11 safety of J&amp;J's talcum powder? 12      A. FDA, the results show there was no asbestos 13 on their own testing of Johnson's powders, and they 14 appeared to be satisfied there were no concerns. 15      Q. And, Dr. Hopkins, our jury's heard a 16 little bit about a citizen's petition and the FDA's 17 conclusions. 18      You were at the company at the time, sir? 19      A. I was with Johnson &amp; Johnson, Johnson &amp; 20 Johnson, yes, at that time, yes. 21      Q. And I'd like to show our jurors again 22 what's in evidence as 7214 A, Tab 75. 23      Doctor, this is the FDA citizen response. 24      You've seen it before, sir? 25      A. Okay.</p>
<p>1       MR. NOLAN: Good morning. 2       THE COURT: So, members of the jury, 3 yesterday when we left off, we were in the process of 4 concluding cross-examination testimony of Johnson &amp; 5 Johnson's corporate representative, Dr. John Hopkins. 6 We will pick up from there. 7       Miss Sullivan. 8       MS. SULLIVAN: Thank you, your Honor. 9 J O H N H O P K I N S, previously sworn. 10 CONTINUED CROSS-EXAMINATION BY MS. SULLIVAN: 11      Q. Good morning, Dr. Hopkins. 12      A. Good morning. 13      Q. Dr. Hopkins, we left off, we were about to 14 talk about the concentration method, but I want to 15 just go back and wrap up on the FDA and the FDA's 16 involvement in the talc issue. 17      Dr. Hopkins, the jury heard about the 18 issue of what happened after the '70s in terms of 19 the back and forth with J&amp;J and the FDA. Can you 20 talk about what was going on in the '70s and then 21 what happened after that? 22      A. Okay. Yeah. Up until late 1970s, there was 23 extensive dialogue and involvement between the top 24 manufacturers and the Food &amp; Drug Administration, but 25 by the time of the late 1970s the Food &amp; Drug</p>	<p>Page 7</p> <p>1       Q. Tab 75, Dr. Hopkins. 2       A. Thank you. I have it. 3       Q. And, Doctor, were you aware of this 4 conclusion by the FDA at the time you were at the 5 company? 6       A. Yes, I was. Yes. 7       Q. And, Doctor, can you talk to our jurors 8 about what a citizen's petition is and what the FDA 9 does in response? 10      A. Okay. A citizen's petition is a facility to 11 allow any citizen in the United States to write or 12 contact the Food &amp; Drug Administration and ask them to 13 investigate any consumer product, medicinal product 14 for its safety. 15      Q. And does it trigger an FDA regulatory 16 investigation? 17      A. Yes. The FDA is compelled to respond, to 18 investigate and determine whether or not there is a 19 concern or not. 20      Q. And, Doctor, the petition was in 1983, and 21 the FDA, after a couple of years of analysis, 22 responds in, it looks like 1986? 23      A. Yes. They responded in 1986. Yes. 24      Q. And, Doctor, are you aware of whether the 25 FDA did extensive analysis and testing of talcum</p>

<p style="text-align: right;">Page 10</p> <p>1 powder in response to this petition?</p> <p>2 A. Yes. They did testing of talcum powders and 3 they reviewed the literature and the data that they 4 had in their own files.</p> <p>5 Q. And if we could, Doctor, just take a look, 6 it talks about the fact that "This is a response" -- 7 this is the FDA writing, "This is a response to your 8 November 8, '83, petition requesting that cosmetic 9 talc be labeled with an asbestos warning statement, 10 information on asbestos particle size and the 11 proportion of talc impurities in the product."</p> <p>12 Now, by 1986, had Johnson &amp; Johnson 13 provided the FDA with testing results and samples 14 and other information?</p> <p>15 A. By 1986, yes. The FDA had received 16 extensive documentation from top manufacturers, 17 including Johnson &amp; Johnson.</p> <p>18 Q. And had the -- was the FDA aware, by 1986, 19 that J&amp;J had tremolite and actinolite occasionally 20 in its talcum powder?</p> <p>21 A. Yes.</p> <p>22 Q. And, Doctor, if you go further into 23 this -- by 1986, had FDA conducted their own 24 analysis and testing of J&amp;J's talcum powder or other 25 companies' talcum powder?</p>	<p style="text-align: right;">Page 12</p> <p>1 FDA goes on to say, "We find there is no basis at 2 this time for the agency to conclude that there is a 3 health hazard attributed to asbestos in cosmetic 4 talc. Without evidence of such a hazard, the agency 5 concludes that there is no need to require a warning 6 label on cosmetic talc."</p> <p>7 And was that the agency's conclusion in 8 1986?</p> <p>9 A. That was the agency's conclusion in July 10 1986, yes.</p> <p>11 Q. And that's the acting commissioner signed 12 off on it, right?</p> <p>13 A. Yes.</p> <p>14 Q. Doctor, are you aware there are other FDA 15 officials who did analysis and testing in the 16 support for the petition?</p> <p>17 A. Yes. The response to the petition was many, 18 many pages of documentation.</p> <p>19 Q. And let's look, Doctor, on page -- sorry 20 about that -- on page 28 of the petition. I want to 21 talk to you about, did the FDA scientists actually 22 do an exposure analysis?</p> <p>23 A. Yes. They did a mathematical exposure 24 analysis to look at the worst-case scenario.</p> <p>25 Q. And our jurors have heard about exposure</p>
<p style="text-align: right;">Page 11</p> <p>1 A. They had investigated pretty well all of the 2 talcum powders on the U.S. market, including Johnson's 3 and other competitive products.</p> <p>4 Q. And the FDA goes on to say, "Our 5 scientists recently reviewed data from these 6 surveillance activities and concluded that the risk 7 from a worst-case estimate of exposure to asbestos 8 from cosmetic talc would be less than the risk from 9 environmental background levels of exposure to 10 asbestos, non-occupational exposure over a 11 lifetime."</p> <p>12 And, Doctor, what was that conclusion in 13 certain lay terms?</p> <p>14 A. In lay terms, they were saying there was no 15 concerns relating to talc sold on the U.S. market, and 16 that the amount of concern was no different from what 17 would be in the normal background.</p> <p>18 Q. In terms of worst-case scenario?</p> <p>19 A. In terms of worst-case scenario.</p> <p>20 Q. In other words, even if you assume that 21 there is a trace amount of asbestos in talcum 22 powder, what was the FDA's conclusion?</p> <p>23 A. That the risk was no greater than that from 24 the environment.</p> <p>25 Q. And, Doctor, it goes on to say that, the</p>	<p style="text-align: right;">Page 13</p> <p>1 analysis, but can you explain what an exposure 2 analysis is and what the FDA did here?</p> <p>3 THE COURT: Counsel, counsel, could I see you 4 at sidebar.</p> <p>5 (Sidebar.)</p> <p>6 THE COURT: Foundation.</p> <p>7 MS. SULLIVAN: He was at the company.</p> <p>8 THE COURT: But for him to testify with 9 regard to what an exposure analysis is?</p> <p>10 MS. SULLIVAN: He's a toxicologist at the 11 company.</p> <p>12 THE COURT: Lay a foundation.</p> <p>13 MS. SULLIVAN: I'm sorry. Sure, sure, sure.</p> <p>14 (Sidebar ends.)</p> <p>15 BY MS. SULLIVAN:</p> <p>16 Q. And, Dr. Hopkins, based on your experience 17 as a toxicologist and as a safety assessor, did you 18 have familiarity with exposure analysis?</p> <p>19 A. Yes. It is a -- it's a means to determine 20 what is the worst-case that can happen if you took a 21 certain amount of something, it could be an aspirin, 22 what would happen if you took an aspirin a day or a 23 hundred aspirin a day, you look for the exposure 24 analysis.</p> <p>25 Q. And, Doctor, did the FDA do an exposure</p>

<p style="text-align: right;">Page 14</p> <p>1 analysis looking at application of baby powder and 2 assuming worst-case scenario whether that that would 3 present a health hazard?</p> <p>4 A. They did that, and they did a mathematical 5 calculation to determine whether or not there was a 6 potential health hazard.</p> <p>7 Q. And if we look at page 28 of the citizen's 8 petition, is this one of the FDA's exposure 9 analysis?</p> <p>10 A. Yes. That's comparing an infant dose, the 11 worst-case scenario, yes.</p> <p>12 Q. And it's the Department of Health and 13 Human Services, FDA scientist, it looks like Gary 14 Flamm, who is the director of the office of 15 toxicological sciences, right?</p> <p>16 A. He's, it appears to be the author, yes -- 17 sorry, he's not the author. He's the recipient.</p> <p>18 Q. And it goes on to talk about a Linda 19 Taylor, and did you review this and do you know that 20 Linda Taylor also did some investigation as part of 21 the FDA's analysis here?</p> <p>22 A. Yes. She was also part of the epidemiology 23 investigators.</p> <p>24 Q. And it talked about using Linda Taylor's 25 report and other information on talc. "We conclude</p>	<p style="text-align: right;">Page 16</p> <p>1 A. Yes.</p> <p>2 Q. Less than one in a hundred million in 3 terms of risk.</p> <p>4 And what did the FDA, in the body of the 5 petition, FDA concluded that that was less than the 6 risk from environmental, just regular background 7 exposure?</p> <p>8 A. That was the conclusion we saw a few minutes 9 ago. Yes.</p> <p>10 Q. And the FDA, in this petition on page 1, 11 talks about, "In fact, there is a general consensus 12 that current talc mines are virtually free of 13 asbestos, offending mines have gradually been 14 abandoned, and that any residual silicates in talc 15 are so finely and smoothly ground as to represent 16 virtually no risk to humans whatsoever, even where 17 an occasion fiber just barely satisfies the 18 technical definition of asbestiform."</p> <p>19 Do you see that?</p> <p>20 A. That is their conclusion, yes.</p> <p>21 Q. And then there is also an analysis by 22 Linda Taylor in the back here, and she talks about 23 her exposure analysis, right, on page 75.</p> <p>24 Do you have it, Doctor?</p> <p>25 A. Yes. She's the author.</p>
<p style="text-align: right;">Page 15</p> <p>1 that the added human risk of lung cancer and 2 mesothelioma from possible asbestos in talc is less 3 than ten to the eighth lifetime risk and quite 4 possibly orders of magnitude less.</p> <p>5 "We have used, as our population at risk, 6 infants that may be routinely dusted with talcum 7 powder for an estimated period of two years."</p> <p>8 And, Doctor, ten to the eighth, is that -- 9 what's the math on that? Is that ten to the eighth, 10 I think --</p> <p>11 A. Is it 100 millionth, yes.</p> <p>12 Q. So it would be like --</p> <p>13 A. Less than one in a hundred million.</p> <p>14 Q. It would be 0.11 -- 00 -- if you do -- 15 yeah, so it's less than 100th millionth of a percent 16 risk, right?</p> <p>17 A. It's less than one in a hundred million.</p> <p>18 Q. I'm sorry, Mr. Nolan is telling me add one 19 more zero.</p> <p>20 A. Yes.</p> <p>21 Q. It's less than 100 millionth of a percent?</p> <p>22 A. It doesn't say percent. At least on this 23 one it doesn't. It's less than one in a hundred 24 million.</p> <p>25 Q. Less than one in a hundred million?</p>	<p style="text-align: right;">Page 17</p> <p>1 Q. And also, she's also an FDA official?</p> <p>2 A. She's employed by the Food &amp; Drug 3 Administration, yes.</p> <p>4 Q. And she talks about, she does an exposure 5 analysis where she assumed a one percent, right?</p> <p>6 Just take a look here, go back to the 7 other -- if we go back to page 32, the analysis we 8 looked at first, it says, "These estimates of added 9 lifetime human cancer risk are two orders of 10 magnitude below those implied in Linda Taylor's memo 11 due to the fact that the more recent detection 12 studies suggest one-tenth of one percent or less 13 asbestos in talc on average rather than the one 14 percent assumed by Dr. Taylor and due to her 15 conversion error"; right?</p> <p>16 A. Yes.</p> <p>17 Q. And so can you tell our jurors what that's 18 about?</p> <p>19 A. A mathematical evaluation was conducted 20 assuming that at worst-case it was one percent, 21 although in reality they got the math wrong, it should 22 have been .1 percent.</p> <p>23 But based on that conclusion, the author, 24 Linda Taylor, concluded that there was no measurable 25 risk.</p>

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1 Q. So Dr. Taylor says when she assumed one 2 percent, and our jurors have heard Dr. Longo's 3 calculations of trace 17 millionths of a percent, 4 nine-thousandths of a percent, so well less than one 5 percent in terms of the allegations of what's been 6 found, right?	1 about that Linda Taylor, talks about Linda Taylor's 2 analysis and that her assumption, does it say 3 whether her assumption was in error about the one 4 percent?
7 A. Yes.	5 A. Yes. Earlier on in that report it said that 6 she should have used a calculation of 0.1 percent.
8 MR. PANATIER: Leading.	7 Q. And it talks about the detection study 8 suggesting a tenth of a percent or less?
9 THE COURT: Objection sustained. Please 10 rephrase.	9 A. That is what the report suggests, she should 10 have used that calculation, yes.
11 BY MS. SULLIVAN:	11 Q. And the FDA -- what was the FDA's final 12 conclusion based on exposure analysis as to whether 13 or not, even if you assume worst-case scenario that 14 there was asbestos in talcum powder, how would it 15 compare to just regular air, background air?
12 Q. Dr. Hopkins, you're aware of the 13 allegations against the company and the allegations 14 of the levels of asbestos found?	16 A. Their conclusion was that the risk was 17 infinitesimally small and it's no different from the 18 background risk.
15 MR. PANATIER: Still leading.	19 Q. Ten to the eighth, which you told us was 20 one --
16 THE COURT: Please rephrase.	21 A. 100 million, one in a hundred million.
17 BY MS. SULLIVAN:	22 Q. Thank you, Doctor.
18 Q. Doctor, are you aware of the levels of 19 asbestos that Dr. Longo, plaintiffs' expert, claimed 20 to find?	23 A. Ten to the minus eight.
21 MR. PANATIER: And, your Honor, this is 22 outside the scope.	24 Q. I want to switch gears and talk to -- did 25 the FDA -- Doctor, did the FDA's analysis and
23 THE COURT: Sidebar.	
24 (Sidebar.)	
25 THE COURT: You can't convert him to an	
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1 expert just because it's part of your direct.	1 citizen's petition put this issue to bed from the
2 MS. SULLIVAN: It's just math, your Honor.	2 FDA's standpoint in terms of the safety of talc?
3 THE COURT: No. I'm not going to allow it.	3 MR. PANATIER: Objection, your Honor.
4 Thank you.	4 Speculation.
5 (Sidebar ends.)	5 THE COURT: Sustained.
6 THE COURT: Objection is sustained. Let's 7 move on.	6 BY MS. SULLIVAN:
8 BY MS. SULLIVAN:	7 Q. Did Johnson & Johnson hear anything 8 further after the FDA's own investigation and 9 analysis while you were at the company?
9 Q. And, Doctor, Dr. Hopkins, so Linda Taylor 10 assumed one percent --	10 A. There were no further demands from the Food 11 & Drug Administration certainly at that time, no.
11 A. She did.	12 Q. I want to switch gears, Doctor, and talk 13 about the concentration method.
12 Q. -- of asbestos as worst-case scenario, and 13 said it would be 100 to 200 times greater than 14 background, and she wasn't sure what the risk was 15 from that exposure, right?	14 And I think you told us and I think our 15 jurors have seen that J&J actually tried to -- did 16 J&J try to make the concentration method work?
16 And then we saw that --	17 A. Yes. The company commissioned several 18 outside experts to look at the possibility of a 19 concentration method from the very early 1970s.
17 THE COURT: Counsel, where's the question?	20 Q. And what were the results of those 21 efforts, Doctor?
18 MS. SULLIVAN: I'm going to ask it --	22 A. None of the people who were working on that, 23 including FDA, who were not commissioned by J&J, came 24 up with a method that was considered to be valid in 25 terms of identifying asbestos or other materials at
19 BY MS. SULLIVAN:	
20 Q. So that's what she says, right,	
21 Dr. Hopkins?	
22 A. Yes. She's concluding that essentially even 23 if you go with the worst-case of one percent, she's 24 saying that there's no measurable risk.	
25 Q. And then the subsequent evaluation talks	

<p>1 very low levels.</p> <p>2 Q. Were there issues, Dr. Hopkins, with the 3 method being able to detect certain kinds of 4 asbestos?</p> <p>5 A. Yes. The liquid density concentration 6 method, Professor Pooley remarked that you could not 7 use that to detect chrysotile, which is one of the 8 more important unpleasant parts of asbestos.</p> <p>9 Q. And I want to show you a document that our 10 jurors have seen, this is Plaintiffs' Exhibit 1096 11 in evidence, Tab 55.</p> <p>12 And, Doctor, this is a document in the 13 early '70s, J&amp;J, and it talks about Dr. Pooley doing 14 some work?</p> <p>15 A. Yes. It does.</p> <p>16 Q. And it actually talks about concentration, 17 right?</p> <p>18 A. Yes.</p> <p>19 Q. And it says they find no asbestos, quotes 20 around asbestos, by doing this with Italian talc, 21 right?</p> <p>22 A. It does.</p> <p>23 Q. And they find Pooley .05 percent of a 24 tremolite type in Vermont, right?</p> <p>25 A. Yes.</p>	<p>Page 22</p> <p>1 can you tell us what that conclusion is?</p> <p>2 MR. PANATIER: Calls for speculation, your 3 Honor.</p> <p>4 THE COURT: Sustained.</p> <p>5 BY MS. SULLIVAN:</p> <p>6 Q. You're the corporate rep. How did the 7 company interpret that conclusion, Dr. Hopkins?</p> <p>8 MR. PANATIER: There's no foundation for 9 that.</p> <p>10 THE COURT: Sustained.</p> <p>11 BY MS. SULLIVAN:</p> <p>12 Q. Dr. Hopkins, based on your review and 13 analysis, is there an issue with a test being too 14 sensitive? You can answer, I think.</p> <p>15 A. Jump up.</p> <p>16 There is a concern if you mistakenly find 17 something that is not asbestos. When you are dealing 18 with highly sensitive testing, you can mistakenly find 19 materials that would not reflect reality.</p> <p>20 Q. And, Doctor, I want to show you what's 21 been marked as Defense Exhibit 8897, T 56, and move 22 it into evidence.</p> <p>23 MR. PANATIER: No objection.</p> <p>24 THE COURT: Admitted.</p> <p>25 (Defense Exhibit 8897, Tab 56, was moved into</p>
<p>Page 23</p> <p>1 Q. Is that referring to asbestos?</p> <p>2 MR. PANATIER: Calls for speculation, your 3 Honor.</p> <p>4 THE COURT: Sustained. Don't answer.</p> <p>5 BY MS. SULLIVAN:</p> <p>6 Q. Does that say asbestos?</p> <p>7 A. It does not say asbestos.</p> <p>8 MR. PANATIER: Your Honor, can we read where 9 the word "asbestos" appears, please?</p> <p>10 MS. SULLIVAN: I read it. It's in quotes.</p> <p>11 THE COURT: Okay. Let's not have that 12 discussion out there.</p> <p>13 Please read it as written.</p> <p>14 BY MS. SULLIVAN:</p> <p>15 Q. And, Doctor, if we turn to page 1896 --</p> <p>16 A. Yes.</p> <p>17 Q. -- it talks about Dr. Pooley developing 18 techniques for pre-concentration of chrysotile and 19 tremolite, right?</p> <p>20 A. Yes. He was commissioned to see if he could 21 make that method work.</p> <p>22 Q. And then it says that the tremolite type 23 is found, and the limitation is that it may be too 24 sensitive.</p> <p>25 Having investigated these test results,</p>	<p>Page 25</p> <p>1 evidence.)</p> <p>2 BY MS. SULLIVAN:</p> <p>3 Q. And, Doctor, Tab 56, this is -- and this 4 is to Dr. -- this is actually to Dr. Pooley -- I'm 5 sorry, to Dr. Pooley from J&amp;J, and is J&amp;J actually 6 sending Dr. Pooley samples to test with the 7 concentration method?</p> <p>8 A. Yes. It's a cover letter to say in June 9 1973, we are sending you samples for evaluation.</p> <p>10 Q. And, Doctor, are you aware of Dr. Pooley's 11 test results trying the concentration method, did he 12 ever find asbestos in J&amp;J's talc?</p> <p>13 A. He did not.</p> <p>14 Q. And if we look to T -- Defense Exhibit 15 8011, Tab 57, and I'd like to move this into 16 evidence, Defense Exhibit 8011.</p> <p>17 MR. PANATIER: I have no objection. I think 18 it may already be in evidence, for the record, but I 19 have no objection.</p> <p>20 THE COURT: Admitted.</p> <p>21 (Defense Exhibit 8011, Tab 57, was moved into 22 evidence.)</p> <p>23 BY MS. SULLIVAN:</p> <p>24 Q. Doctor, this is some more work by 25 Dr. Pooley?</p>

<p style="text-align: right;">Page 26</p> <p>1 A. Yes, it is. It's a report of his research.      2 Q. And our jurors have heard about      3 Dr. Pooley.      4 He was the independent expert in the UK?      5 A. Yes. He's a geologist.      6 Q. And Dr. Pooley talks about some testing      7 here and he says, "A large number of fibrous      8 particles in both powders have been analyzed with no      9 positive identification of an amphibole or      10 chrysotile particle. It is estimated that this type      11 of analysis can readily be applied to a relatively      12 large and statistically significant number of      13 fibrous particles to confirm the presence of and      14 quantity -- and quantify the asbestos content of      15 talcum powder.      16 "This examination technique has been      17 applied to a sample of talc containing 30 percent      18 tremolite by weight, which every fiber was confirmed      19 as being amphibole."      20 And then it goes on to say, Doctor, that      21 "the examination of several hundred particles in      22 Vermont and Italy has so far proved negative."      23 So what was Dr. Pooley's conclusion, based      24 on his analysis of Johnson &amp; Johnson's talcum      25 powder?</p>	<p style="text-align: right;">Page 28</p> <p>1 actually tried it, right?      2 A. Yes. He developed a method and evaluated      3 products by that method.      4 Q. And it looks like he actually adds a      5 contaminant to test the method, right? I'm sorry,      6 does he actually add asbestos and try to test it?      7 A. Yes. He uses a rare form of asbestos called      8 crocidolite which --      9 Q. And then going to his conclusions here, he      10 goes on to say that "tests have also been run upon      11 the contaminated powder," that's referencing the      12 spiked sample, I take it?      13 A. Well, the contaminated powder, he added two      14 percent crocidolite by weight, contaminated talc      15 powder, so...      16 Q. And it goes on to say, "The tests have      17 proven to be unsatisfactory and a comparison of the      18 two procedures is likely to show that heavy liquid      19 separation is a very inaccurate and unsuitable      20 technique to adopt."      21 A. That was his conclusion.      22 Q. So did Dr. Pooley try to make it work, and      23 what was his conclusion about this heavy liquid      24 concentration method?      25 A. His conclusion was that it's inaccurate and</p>
<p style="text-align: right;">Page 27</p> <p>1 A. He was saying that where he had a positive      2 sample that contained 30 percent tremolite, he could      3 find it, but when he looked at the Johnson talc from      4 Vermont and Italy he could find nothing.      5 Q. In other words, he did a comparison --      6 A. He did a comparison with something that had      7 30 percent tremolite and found it, but when he looked      8 at the powder from Vermont and from Italy he could not      9 find anything.      10 Q. And did Dr. Pooley, can you tell our      11 jurors, did Dr. Pooley do a fair amount of testing      12 for J&amp;J over the years?      13 A. He did. Yes. He was one of the very few      14 experts that have the skill set to understand the      15 analysis.      16 Q. And did Dr. Pooley ever find asbestos in      17 Johnson &amp; Johnson's finished product?      18 A. No.      19 Q. And if we look, Dr. Hopkins, to page 8 of      20 the same document, on the PDF page 8, page 9, it      21 talks more about the concentration that Dr. Pooley      22 was trying to make work, right?      23 A. It does. It describes the procedure he was      24 using.      25 Q. And it talks about the fact that he's</p>	<p style="text-align: right;">Page 29</p> <p>1 unsuitable technique.      2 Q. And then I want to show you Defense      3 Exhibit 8196, Dr. Hopkins, Tab 58. I believe this      4 is in evidence as a Plaintiffs' Exhibit, but if not,      5 Defense Exhibit 8196, we'd like to move it in.      6 MR. PANATIER: I don't have an objection,      7 your Honor.      8 THE COURT: Admitted.      9 (Defense Exhibit 8196, Tab 58, was moved into      10 evidence.)      11 BY MS. SULLIVAN:      12 Q. Dr. Hopkins, did J&amp;J also have another      13 outside consultant, Colorado School of Mines also      14 tried the concentration method and tested J&amp;J      15 product with this concentration method?      16 A. Yes. Colorado School of Mines, they worked      17 for about three years on that project.      18 Q. And what they say is that they're trying      19 to examine with the purpose of identifying all      20 minerals present, even those at levels of a few      21 parts per million, right?      22 A. That was the challenge they were given, yes.      23 Q. And they used a heavy liquid separation,      24 right?      25 A. Yes. They did. Yes.</p>

<p style="text-align: right;">Page 30</p> <p>1 Q. And can you tell our jurors, having run 2 samples through the heavy liquid density separation, 3 did the Colorado School of Mines find asbestos in 4 Johnson &amp; Johnson's talcum powder?</p> <p>5 A. They did not report finding asbestos.</p> <p>6 Q. And they say, "Amphibole was not 7 conclusively identified in the sample," right?</p> <p>8 A. Yes.</p> <p>9 Q. And it talks about that what they're 10 seeing showed only talc, right?</p> <p>11 A. Yeah. They describe what they could 12 visualize under the microscope, and they examined 13 those particles specifically.</p> <p>14 Q. And, Doctor, do you know whether the FDA 15 tried to make the concentration method work?</p> <p>16 A. FDA tried their own version of a 17 concentration method, yes.</p> <p>18 Q. And we'll look at some documents. In 19 other words, the FDA had their own scientists try to 20 see if the concentration method was a good way to 21 test talc?</p> <p>22 A. Yes. They used a different protocol, but 23 they spent about a year and a half on that program.</p> <p>24 Q. And what did the FDA conclude?</p> <p>25 A. Again, they concluded that it did not</p>	<p style="text-align: right;">Page 32</p> <p>1 Were you familiar with that effort?</p> <p>2 A. Yeah. That was a little research project 3 conducted by the mining operation.</p> <p>4 Q. And I want to -- I want to go back to a 5 document that our jurors have seen and ask you some 6 questions about it, if I could, Doctor, and it is 7 Defense Exhibit 7089. It is Tab 69 in your binder.</p> <p>8 A. Yes.</p> <p>9 Q. And, Doctor, can you -- our jurors have 10 seen this. Can you explain, first of all, it says 11 confidential. Could you tell our jurors why 12 something like this would be confidential?</p> <p>13 A. Yeah. If you are working on a secret 14 project you just mark it confidential, because very 15 often projects can have value commercially for a 16 patent. So if you can create a patent around a 17 project you can then have commercial value which you 18 can sell to a competitor or to someone else.</p> <p>19 Q. For a patent, you said?</p> <p>20 A. For a patent, yes. Patents are often sold, 21 particularly in the electronics industry, patents are 22 sold between companies.</p> <p>23 Q. And can you tell our jurors what's going 24 on, what this plant trial is about?</p> <p>25 A. It's to look at, I think I said yesterday</p>
<p style="text-align: right;">Page 31</p> <p>1 function as a means to concentrate the minerals.</p> <p>2 Q. Doctor, our jurors have seen some 3 documents about Project 101. Can you tell us what 4 Project 101 was?</p> <p>5 A. Yes. It was in the late '60s, early '70s, 6 there was an intention to look for alternative talc 7 sources here in the United States, recognizing that 8 the deposit in Vermont, the Hammondsville mine had a 9 finite life. It was estimated to be about 25 years, 10 20 to 25 years. So to look for an alternative source 11 of talc. And something like 50 different talc 12 deposits in mines were evaluated in the various states 13 in the U.S. including California, Montana, Alabama, 14 Carolinas, for, as an opportunity to make cosmetic 15 talc.</p> <p>16 Q. And so was J&amp;J exploring various other 17 mines and trying to figure out what minerals could 18 be there or not?</p> <p>19 A. Yes. Yeah. You look for a mine, but of 20 course, or you look for a deposit, but you also have 21 to make sure it meets your requirements.</p> <p>22 Q. And, Doctor, our jurors have heard about 23 froth flotation testing and J&amp;J spiking samples to 24 see whether they can come up with a method to remove 25 any minerals chemically.</p>	<p style="text-align: right;">Page 33</p> <p>1 that typically when you're floating the talc and 2 washing it you use a material that looks very similar 3 to dish wash liquid. But the idea was to, and that's 4 what was being used. If you could use other materials 5 could they get a better quality of talc and could, in 6 theory, question, could you remove things that you 7 didn't want.</p> <p>8 So they were looking at butanol and butanol 9 citric acid, two other types of chemical, as a means 10 to clean up the talc and get even better quality talc.</p> <p>11 Q. And can you tell us whether these 12 experiments were started in response to the press 13 the Lewis (sic) and Langer reports?</p> <p>14 MR. PANATIER: Your Honor, this is 15 speculation.</p> <p>16 THE COURT: Objection sustained.</p> <p>17 BY MS. SULLIVAN:</p> <p>18 Q. Based on the dates, Doctor, and the dates 19 of some of this activity, do you know whether this 20 was started after the reports in the press by 21 Dr. Lewis and Langer?</p> <p>22 MR. PANATIER: Lack of foundation.</p> <p>23 THE COURT: Sustained.</p> <p>24 BY MS. SULLIVAN:</p> <p>25 Q. Dr. Hopkins, do you have an understanding,</p>

Page 34 1 based on your experience and review of documents, 2 about the timing of when these products, when these 3 projects were started? 4 A. The timing of the projects was in the early 5 1970s, which was after the discussions in the 6 literature from Lewin and Langer. 7 Q. And it talks about, is this a research 8 project, Doctor, plant trial? 9 A. Yes. 10 Q. And it talks about some testing on product 11 samples, right, by, looks like a scientist from 12 Dartmouth on page 4? 13 A. Yes. Yes. Several people were involved. 14 Q. And Dr. Reynolds at Dartmouth, it looks 15 like he tested some amphiboles, and it also looks 16 like he tested finished product, looking at page 5 17 on top? 18 A. Yes. He tested finished product. 19 Q. And what did Dr. -- what did Dr. Reynolds 20 from Dartmouth conclude about the finished product 21 and whether or not they had asbestos? 22 A. Sorry, I've lost my place. 23 Q. I'm sorry. It's on the top of page 5, Dr. 24 Hopkins. 25 A. I'm sorry. I was reading it.	Page 36 1 Q. And what does that mean, based on your 2 understanding and experience on the issue whether 3 they found asbestos in the finished product? 4 A. The amphiboles did not meet the definition 5 of asbestos. 6 Q. And then it looks like Mr. Zeitz here is 7 talking about the fact that they're doing this 8 experiment because of the potential of asbestos 9 being in talc? 10 A. That was his rationale, yes. 11 Q. And if we look at -- Doctor, are you aware 12 whether, in doing this test, J&J scientists actually 13 put asbestos into the talc to test these chemical 14 reagents? 15 A. There is a test report where talc was 16 deliberately contaminated with asbestos materials to 17 see if you could find it and remove it. 18 Q. Doctor, if we look at page 38 of this 19 research report, page 38 of the PDF. 20 A. I have that. 21 Q. Yes. Does it talk about these experiments 22 and the fact that the J&J scientists were actually 23 adding asbestos into the talcum powder before they 24 tested these reagents? 25 A. Yeah. The sentence says, "Ground ore from
Page 35 1 What they concluded was that the analysis of 2 finished products indicates reduction in chlorite 3 content attributable to the alcohol systems, and they 4 concluded that the detected, excuse me, detected 5 amphibole minerals did not appear to be fibrous form 6 in any of the product samples. 7 Q. What does that mean? 8 MR. PANATIER: Objection. Can we just clear 9 up on the next page, this is Vernon Zeitz, this isn't 10 Dartmouth. 11 A. The author is Mr. Zeitz, yes. 12 Q. The author is Mr. Zeitz, but he is 13 reporting, is he not reporting, Dr. Hopkins, on the 14 Dartmouth results? 15 A. The previous paragraph which I was reading 16 through was a summary of the report from Dartmouth 17 College. 18 Q. And what does the summary of the report 19 from the Dartmouth testing say about what Dartmouth 20 found on the finished samples about whether they 21 found asbestos in the finished product? 22 A. The author, Mr. Zeitz, is summarizing, he 23 said that the detected amphibole minerals did not 24 appear in a fibrous form in any of the product 25 samples.	Page 37 1 the Hammondsburg mine was doped with one percent by 2 weight of the fibrous form of anthophyllite." 3 Q. So they're spiking the samples with 4 asbestos to test this? 5 A. Yes. Well, with anthophyllite, yes. 6 Q. And, Doctor, there's also a chart in this 7 that the plaintiffs' lawyers have shown our jurors 8 on page 36, talking about chrysotile? 9 A. Yes. 10 Q. And are you aware of whether, based on 11 other information and documents, these are spiked 12 samples? 13 A. The understanding is that they are spiked 14 samples. 15 Q. And if -- 16 MR. PANATIER: Your Honor, there's no 17 foundation for that. 18 THE COURT: Sustained. 19 BY MS. SULLIVAN: 20 Q. If we could look at Defense Exhibit 7085, 21 I believe it's in evidence. That's Tab 96. 22 In this research project, Dr. Hopkins, are 23 they spiking samples to test the reagents? 24 A. Let me get to the page first. 25 THE COURT: What was that exhibit, counsel?

<p style="text-align: right;">Page 38</p> <p>1 MS. SULLIVAN: I'm sorry?</p> <p>2 THE COURT: What was that Tab Number?</p> <p>3 MR. PANATIER: 96.</p> <p>4 THE COURT: Thank you.</p> <p>5 BY MS. SULLIVAN:</p> <p>6 Q. Doctor, is this going back to the plant trial?</p> <p>7 A. It's the same date. I'm checking the dates.</p> <p>8 Q. Yeah.</p> <p>10 A. I want to make sure we're all on the same page here.</p> <p>12 Q. Yeah.</p> <p>13 A. Yes, that's the same time. That's the same wet washing agent, it's butanol citric acid.</p> <p>15 Q. And so looking at this March 1974 document, it kind of gives, does it give an overview of the research project that had been conducted in the prior months?</p> <p>19 A. It does.</p> <p>20 Q. January?</p> <p>21 A. It's the same description where they are washing the product with citric acid or butanol citric acid as washing agents.</p> <p>24 Q. The same reagent we saw in the plant trial from January, right?</p>	<p style="text-align: right;">Page 40</p> <p>1 two epidemiology studies?</p> <p>2 A. Yes. He is a well recognized epidemiologist.</p> <p>4 Q. And the first -- he did it on the Italian mines?</p> <p>6 A. He did. Yes.</p> <p>7 Q. And our jurors have heard that the first one was funded by J&amp;J.</p> <p>9 Was the second one funded by J&amp;J?</p> <p>10 A. No. It was not.</p> <p>11 Q. And I want to show you the draft, the pre publication draft from the second study that J&amp;J, it looks like got as a courtesy, and ask you some questions about it.</p> <p>15 This is Plaintiffs' Exhibit 2675, and it's at your Tab 283, Doctor.</p> <p>17 And this is a pre publication draft, right?</p> <p>19 MR. PANATIER: Your Honor, my objection is this was covered in quite a bit of length on the 25th.</p> <p>21 THE COURT: Sidebar.</p> <p>22 MS. SULLIVAN: I didn't finish.</p> <p>23 THE COURT: Sidebar.</p> <p>24 (Sidebar.)</p> <p>25 MS. SULLIVAN: Your Honor, I had abbreviated</p>
<p style="text-align: right;">Page 39</p> <p>1 A. Yes. Of the same year, yes.</p> <p>2 Q. And it's kind of reviewing -- and does it talk about, on page 2, chrysotile being doped into the talc on page --</p> <p>5 A. Yeah. It describes chrysotile, what chrysotile is, and it describes the experiment. Yeah. It describes what chrysotile is and it goes on to see if you can remove it.</p> <p>9 Q. And it talks about it being doped into the talc, right?</p> <p>11 A. Yes.</p> <p>12 Q. And going back to page 36, we see chrysotile here, right?</p> <p>14 A. Yes. We do.</p> <p>15 Q. As part of the doping experiment?</p> <p>16 A. Yes.</p> <p>17 Q. And, Doctor, I want to talk to you about, go back briefly to the Rubino.</p> <p>19 You are familiar with the epidemiology studies and you were actually asked some questions about a draft publication, right?</p> <p>22 A. Yes.</p> <p>23 Q. I want to go back to that briefly.</p> <p>24 And Dr. Rubino, I think our jury has heard, was a scientist and epidemiologist who did</p>	<p style="text-align: right;">Page 41</p> <p>1 time with Dr. Hopkins. I talked to him about the first publication and what was published. Now I want to talk to him about what's in his pre publication and compare it to the same.</p> <p>5 MR. PANATIER: That's exactly what counsel did. She took, I remember she took the cancers, the excess cancers reported here and she related them back and showed that they were, at least according to them, that they were published. And that was the very first thing --</p> <p>11 MS. SULLIVAN: Two different papers.</p> <p>12 THE COURT: Wait. Stop that.</p> <p>13 MR. PANATIER: It was this document.</p> <p>14 MS. SULLIVAN: Two different papers.</p> <p>15 THE COURT: Okay. Can you show me that?</p> <p>16 MR. PANATIER: Yeah, of course.</p> <p>17 MS. SULLIVAN: This is a different question --</p> <p>19 THE COURT: He's not here right now.</p> <p>20 MR. PANATIER: Let me just bring it up real fast. I think it was in the morning.</p> <p>22 THE COURT: Where's the reference to it being in the same paper?</p> <p>24 MR. PANATIER: So they have the pre publication version right now, the draft, this</p>

<p style="text-align: right;">Page 42</p> <p>1 manuscript is intended for. And then we can go to the 2 part where they talk about the cancers. 3 THE COURT: So the witness has just testified 4 that they were provided a draft of the second as a 5 courtesy. 6 MR. PANATIER: In fact, see, so here's where 7 they're talking about the different cancers, the 8 esophageal cancer which is reported right there. So 9 they're going through individual cancers -- 10 THE COURT: This was already covered. 11 MS. SULLIVAN: No, your Honor. This is what 12 I want to show. It wasn't covered. The whole process 13 wasn't the same in the final paper and that things were 14 not reported because they were related to alcohol. 15 That was not covered. 16 MR. PANATIER: That's fine. 17 MS. SULLIVAN: I had three hours -- 18 THE COURT: Go. Go ahead with those two 19 questions. 20 MS. SULLIVAN: Thank you. 21 THE COURT: All right. 22 (Sidebar ends.) 23 BY MS. SULLIVAN: 24 Q. Okay. Doctor, going back -- so if we go 25 to page, looks like Bates Number 7070, Doctor, on</p>	<p style="text-align: right;">Page 44</p> <p>1 page 64, Doctor, and he talks about "when the total 2 occurrence of these neoplasms" -- and that's cancer, 3 right? 4 A. Yeah. Neoplasm relates to cancer. 5 Q. -- "was splitted by site, there was no 6 evidence of any significant increase of specific 7 site tumors." Right? 8 A. Yes. 9 Q. And, but then he talks about "in 10 non-malignant diseases, there was an excess of 11 deaths from alcohol-related issues." Right? 12 A. Yeah. Yes. 13 Q. And if we look at this chart, on page, 14 plaintiffs showed you on page 89, it talks about 15 deaths from all causes, right? 16 A. Let me get there. 17 Q. Sure. 18 A. Yes. It summarizes deaths from all 19 malignant causes. 20 Q. And if we look at the final paper, Defense 21 9382, Tab 284, which you were shown, are all -- in 22 Rubino's final paper, are all the deaths reported 23 the same? 24 A. Yes. 25 Q. 560?</p>
<p style="text-align: right;">Page 43</p> <p>1 the discussion of this Rubino report. 2 And Dr. Rubino reports his findings, 3 right, on the Italian mine? 4 A. I think we've got the wrong thing. What 5 Bates number? 6 Q. If you look at the Bates Number is 9070, 7 and it's Tab -- 8 A. I've got it. 9 Q. Great. 10 And he talks about his findings here. 11 "These additional findings support the hypothesis 12 that lung cancer is unrelated to exposure to this 13 non-asbestiform talc. The excess of esophageal 14 cancer in both miners and millers which also have 15 shown a significant increase of cirrhosis of the 16 liver suggest that both diseases might have a common 17 cause in excessive alcohol consumption. These 18 habits were phenomenal already assessed before 19 starting the investigation on mortality." 20 And then it goes on to say, "No data 21 suggestive of a relationship between cancer of other 22 sites and talc exposure were obtained." 23 Right? 24 A. Yeah. That was his summary. 25 Q. And if we look at page, he also goes on on</p>	<p style="text-align: right;">Page 45</p> <p>1 A. They observed 560. 2 Q. 560? 3 A. Expected 446. 4 Q. 4469 -- 5 A. So they're in both reports. 6 Q. -- 4469, 125, 193, 193, 164, all the 7 deaths are reported? 8 A. Yes. The reports are not dissimilar. 9 Q. And it goes on to say that "there is, in 10 both miners and millers, a significant excess of 11 overall mortality, mainly accounted for by 12 respiratory diseases by pneumoconiosis." 13 A. Pneumoconiosis. 14 Q. And what is that, Doctor? 15 A. It's a dust disease. You get it with any 16 dust exposure, whether it's coal mining or any mining 17 area, but also sometimes in people exposed to dust in 18 the workplace. 19 Q. And is that cancer? 20 A. No. It's just damage to the lungs. 21 Q. And it goes on to say there's a low 22 incidence of cancer observed, right? 23 A. That's what is reported, yes. 24 Q. And he goes on to say his conclusion -- 25 MR. PANATIER: Your Honor, I'm just going to</p>

<p>1 object to continually leading.</p> <p>2 THE COURT: It has been leading. Can you</p> <p>3 just please rephrase?</p> <p>4 MS. SULLIVAN: Sure.</p> <p>5 BY MS. SULLIVAN:</p> <p>6 Q. Can you just read our jurors his</p> <p>7 conclusion, Dr. Hopkins?</p> <p>8 A. Yeah. Happy to read it.</p> <p>9 "In conclusion, our findings show that no</p> <p>10 relationship has been found between Italian talc</p> <p>11 exposure and cancer, whereas pneumoconiosis may be</p> <p>12 observed."</p> <p>13 Q. And is that consistent with what</p> <p>14 Dr. Rubino found in his pre -- in other words, were</p> <p>15 the conclusions the same?</p> <p>16 A. Yes. The so-called pre publication copy is</p> <p>17 not dissimilar in its conclusions from the final</p> <p>18 report.</p> <p>19 Q. And have you seen, Dr. Hopkins, any</p> <p>20 evidence that J&amp;J had any involvement in what</p> <p>21 appeared in the final paper?</p> <p>22 A. None whatsoever.</p> <p>23 Q. And J&amp;J, I think you told us, did not, did</p> <p>24 they fund the second study?</p> <p>25 A. There was no funding from Johnson &amp; Johnson.</p>	<p>Page 46</p> <p>1 Can you talk to us about what that was and</p> <p>2 what that was about?</p> <p>3 A. Yeah. Keep it simple. A round robin is</p> <p>4 when you have, in this case, a test method, and you</p> <p>5 want to see if various laboratories are able to</p> <p>6 conduct that test method and get the correct result.</p> <p>7 So the round robin is each of the various</p> <p>8 laboratories are in the round and they're given the</p> <p>9 test method and say here, can you get this test method</p> <p>10 to work.</p> <p>11 So in this case it was the test method for</p> <p>12 measuring asbestos in talc using the CTFA J4-1.</p> <p>13 Q. And, Doctor, you told us that the J4-1</p> <p>14 method was x-ray and PLM?</p> <p>15 A. They're the two components, yes.</p> <p>16 Q. Polarized light and x-ray.</p> <p>17 And I think you also told us, did J&amp;J do</p> <p>18 more than that?</p> <p>19 A. Yes. J&amp;J, in addition to that, did</p> <p>20 transmission electron microscopy.</p> <p>21 Q. So was the round robin an effort to test</p> <p>22 the validity of the industry standard method with</p> <p>23 x-ray and polarized light?</p> <p>24 A. Validity, and also the ability of various</p> <p>25 laboratories to use that method.</p>
<p>Page 47</p> <p>1 THE COURT: Why don't we take a break before</p> <p>2 you move on to the next topic.</p> <p>3 MS. SULLIVAN: Sure.</p> <p>4 THE COURT: Members of the jury, we're going</p> <p>5 to take the morning break now. 15 minutes.</p> <p>6 Leave your notebooks here. Remember the</p> <p>7 instructions I provided to you: No discussions with</p> <p>8 regard to this case, including the testimony you just</p> <p>9 heard. No research, please.</p> <p>10 And be ready to come back up at 25 of. Thank</p> <p>11 you. Enjoy your break.</p> <p>12 (Jury exits.)</p> <p>13 THE COURT: We're off the record.</p> <p>14 (Recess: 10:17 a.m. to 10:39 a.m.)</p> <p>15 COURT OFFICER: Jury's entering.</p> <p>16 (Jury enters.)</p> <p>17 THE COURT: Please be seated. Make sure cell</p> <p>18 phones are turned off. Thank you.</p> <p>19 Thank you, Miss Sullivan.</p> <p>20 MS. SULLIVAN: Thank you, your Honor.</p> <p>21 THE COURT: Please continue.</p> <p>22 BY MS. SULLIVAN:</p> <p>23 Q. Dr. Hopkins, I want to switch topics, talk</p> <p>24 a little bit about round robin testing which our</p> <p>25 jurors have heard some about.</p>	<p>Page 49</p> <p>1 Q. And did J&amp;J participate in that testing?</p> <p>2 A. They were one of the people in that test.</p> <p>3 Yes.</p> <p>4 Q. Was FDA involved in that effort as well?</p> <p>5 A. They were also one of the laboratories</p> <p>6 involved, yes.</p> <p>7 Q. And if we look at, this is Defense Exhibit</p> <p>8 8012. I believe it's a Plaintiff's Exhibit, but if</p> <p>9 not, I would like to move it in. It's Tab 53,</p> <p>10 Dr. Hopkins.</p> <p>11 Your Honor?</p> <p>12 MR. PANATIER: No objection.</p> <p>13 THE COURT: Admitted.</p> <p>14 (Defense Exhibit 8012, Tab 53, was moved into</p> <p>15 evidence.)</p> <p>16 BY MS. SULLIVAN:</p> <p>17 Q. Doctor, if we look at this March 1977</p> <p>18 document, is this a report of the initial round</p> <p>19 robin testing that tests the J4-1 XRD polarized</p> <p>20 light method in terms of the testing standard?</p> <p>21 A. Yes. It summarizes the initial results from</p> <p>22 the various laboratories.</p> <p>23 Q. And does it talk about what they're</p> <p>24 spiking the samples with to test the method?</p> <p>25 A. Yep. Yes. They state that Table 1 shows</p>

<p style="text-align: right;">Page 50</p> <p>1 that they spiked it with CTFA standard tremolite, 2 which is the common massive variety, should not be 3 detected as asbestosiform.</p> <p>4 Q. And what does that mean, Dr. Hopkins?</p> <p>5 A. They were spiking it with an amphibole, 6 tremolite, but it's non-asbestos form of tremolite.</p> <p>7 Q. Can you tell us whether the method was 8 determining if there was asbestos, and then also 9 whether or not they could distinguish between 10 asbestos and non-asbestiform material?</p> <p>11 A. Yeah. The method was to determine if they 12 could find amphibole, which is the X-ray diffraction, 13 and they should have been able to detect amphibole 14 because the tremolite exists as an amphibole in its 15 asbestos form and non-asbestos form.</p> <p>16 So then you would go on to look at part two 17 of the method, which is polarized light microscopy, to 18 see whether it was asbestos tremolite or non-asbestos 19 tremolite.</p> <p>20 Q. And if we look at the actual test results, 21 going to page 4 of the report, are you with me, 22 Doctor?</p> <p>23 A. Yes.</p> <p>24 Q. And so it says that, it should be a plus 25 if they -- can you tell us what that means here on</p>	<p style="text-align: right;">Page 52</p> <p>1 tremolite, which is what they spiked it with, right?</p> <p>2 A. Yes. You then go on to look at polarized 3 light microscopy, which is part two. And if you 4 detect that, then you put a circle around it.</p> <p>5 Q. And it looks like one, two, three, four, 6 five, I'm not sure if the FDA did this part or not, 7 but five of the seven labs actually did, were able 8 to tell the difference between whether it was 9 asbestos or not?</p> <p>10 A. They were. Yes.</p> <p>11 Q. And, Doctor, was there some follow-up to 12 this testing methodology?</p> <p>13 A. There was. Yes. Because as were made clear 14 in some of the reports, not all of the labs got it 15 right the first time. So there was some follow-up.</p> <p>16 Q. And by the way, did J&amp;J get it right the 17 first time?</p> <p>18 A. They did. Yes.</p> <p>19 Q. And if we look at defense exhibit -- I'm 20 sorry, looks like it's a Plaintiffs' Exhibit, 2563 21 in evidence, I would show you, that's at Tab 52.</p> <p>22 Doctor, is this a follow-up document about 23 the minutes of the round robin testing?</p> <p>24 A. It is. Yes. It summarized, they had a 25 meeting and discussed the results from pictures we've</p>
<p style="text-align: right;">Page 51</p> <p>1 top?</p> <p>2 A. Sample plus that's on the right-hand side, 3 it would fail the CTFA method part one; in other 4 words, you'd think oh, there's a problem here. But 5 part one is just X-ray diffraction. So all you're 6 saying is an amphibole with part one.</p> <p>7 Q. So if there's a plus there does that mean, 8 can you tell us whether that means they found an 9 amphibole or not?</p> <p>10 A. A plus means that it failed CTFA 1, which 11 would imply you've got an amphibole present, so you 12 then need to determine is that amphibole asbestos 13 amphibole or non-asbestos, and that's when you do part 14 two, which is the, the little circle on the left-hand 15 side.</p> <p>16 Q. So can you tell us whether fail is like 17 failing a drug test, if it's a plus they found a 18 drug or if it's a plus they found the amphibole?</p> <p>19 A. If it's a plus, they found the amphibole.</p> <p>20 Q. And so in here it looks like one, two, 21 three, four, five, six of the seven labs found the 22 amphibole, right, six pluses?</p> <p>23 A. They did. Yes.</p> <p>24 Q. And then it says here there should be a 25 circle if you can tell that it's not asbestosiform</p>	<p style="text-align: right;">Page 53</p> <p>1 just seen on the screen.</p> <p>2 Q. Does it show that the FDA was involved in 3 assessing this method for testing of asbestos?</p> <p>4 A. Yes. Yes. They were part of the team.</p> <p>5 Q. And it talks about to verify whether the 6 method is accurate, reliable and practical, right?</p> <p>7 A. That was the purpose of the method, of the 8 round robin, the test facility, to see if --</p> <p>9 Q. Yeah.</p> <p>10 A. -- the various labs could get it to work as 11 a reliable method.</p> <p>12 Q. It says the objectives had not yet been 13 achieved, right?</p> <p>14 A. Yes, not yet, because not every lab got it 15 right.</p> <p>16 Q. And then what, in terms of follow-up, 17 what's suggested here as far as McCrone getting 18 involved?</p> <p>19 A. Dr. Schulz, who is one of the participants 20 proposed that the OSHA field member and to be retained 21 in working with the definition, so he goes on to talk 22 about that, and look at a tentative revision of part 23 two in which incorporates suggestions from McCrone and 24 other microscopists in which instructions are more 25 clear and precise. And so those instructions were</p>

<p style="text-align: right;">Page 54</p> <p>1 distributed to the team.</p> <p>2 Q. So did Dr. McCrone's lab get involved to</p> <p>3 kind of help other labs become more reliable in</p> <p>4 implementing this method?</p> <p>5 A. That was what was reported, yes.</p> <p>6 Q. And, Doctor, are you aware of whether</p> <p>7 there was a re-test, another round robin test to</p> <p>8 test the method?</p> <p>9 A. There was a follow-up event. Yes.</p> <p>10 Q. And let's look at Plaintiffs' Exhibit</p> <p>11 3194. And this document is in May of 1977, right,</p> <p>12 the one we just looked at?</p> <p>13 A. Yes.</p> <p>14 Q. And I want to look at -- this is at Tab</p> <p>15 298.</p> <p>16 And, Doctor --</p> <p>17 THE COURT: Hold on.</p> <p>18 MS. SULLIVAN: Plaintiffs' Exhibit, your</p> <p>19 Honor, in evidence.</p> <p>20 THE COURT: Is it already --</p> <p>21 MR. PANATIER: No objection.</p> <p>22 THE COURT: Continue.</p> <p>23 BY MS. SULLIVAN:</p> <p>24 Q. And, Doctor, this is almost a year later.</p> <p>25 Does this talk about a recently completed round</p>	<p style="text-align: right;">Page 56</p> <p>1 testing, no asbestos was found?</p> <p>2 A. It does. Yes.</p> <p>3 Q. And, you know, I think the plaintiffs</p> <p>4 talked to you about destroying the copy of the</p> <p>5 table?</p> <p>6 A. That was mentioned. Yes.</p> <p>7 Q. And the table -- the table that said no</p> <p>8 asbestos was found?</p> <p>9 A. Well, that's what was reported.</p> <p>10 Q. And do you know, Doctor, why -- have you</p> <p>11 seen documents about why the table was destroyed,</p> <p>12 looking at Defense Exhibit 8396, Tab 297.</p> <p>13 Move it into evidence. Any objection?</p> <p>14 MR. PANATIER: I'm still taking a look at it.</p> <p>15 No objection.</p> <p>16 THE COURT: Admitted.</p> <p>17 (Defense Exhibit 8396, Tab 297, was moved</p> <p>18 into evidence.)</p> <p>19 BY MS. SULLIVAN:</p> <p>20 Q. Doctor, this looks like it's a letter from</p> <p>21 lawyers?</p> <p>22 A. Yeah. It does. From Washington DC.</p> <p>23 Q. Do they talk about antitrust concerns?</p> <p>24 A. Yes.</p> <p>25 Q. So do they say, the lawyers say, "Destroy</p>
<p style="text-align: right;">Page 55</p> <p>1 robin?</p> <p>2 A. Yes. This was ten months later. Yes.</p> <p>3 Q. And so, Doctor, you're aware there was a</p> <p>4 second round robin testing to --</p> <p>5 A. Yes.</p> <p>6 Q. -- determine if the test was reliable?</p> <p>7 A. That is what this document reports, the</p> <p>8 summary of the second version.</p> <p>9 Q. It talks --</p> <p>10 MR. PANATIER: Your Honor, I would like just</p> <p>11 to object. It doesn't say second version.</p> <p>12 THE COURT: Objection sustained.</p> <p>13 BY MS. SULLIVAN:</p> <p>14 Q. Does it talk about a recently completed</p> <p>15 test?</p> <p>16 A. It does, yes.</p> <p>17 Q. And it's about a year after the first one?</p> <p>18 A. It's about ten months later, yes.</p> <p>19 Q. Have you seen other documents confirming</p> <p>20 that there were two tests, Dr. Hopkins?</p> <p>21 A. I've not seen other documents that I can</p> <p>22 recollect. This is the document I'm aware of which</p> <p>23 summarized ten months later they --</p> <p>24 Q. Recently completed.</p> <p>25 Does it talk about the fact that in the</p>	<p style="text-align: right;">Page 57</p> <p>1 the code to prevent any antitrust issues"?</p> <p>2 A. They do, yes. That was their direction.</p> <p>3 Q. And it was the code that talked about the</p> <p>4 fact that nobody found any asbestos, right?</p> <p>5 A. That was the code, yes.</p> <p>6 MR. PANATIER: Leading, your Honor.</p> <p>7 THE COURT: Sustained. Please do not lead</p> <p>8 the witness.</p> <p>9 BY MS. SULLIVAN:</p> <p>10 Q. Okay. Doctor, in terms of the code, what</p> <p>11 was the finding as far as whether anybody had</p> <p>12 asbestos in their talc?</p> <p>13 A. Well, no one had asbestos in their talc.</p> <p>14 Q. I want to switch gears, Doctor, and talk</p> <p>15 to you about, you were asked about an article by</p> <p>16 Dr. Paoletti, and I think plaintiffs marked it for</p> <p>17 identification Compton 1.</p> <p>18 We'd like to put that up --</p> <p>19 MR. PANATIER: Your Honor, we didn't --</p> <p>20 THE COURT: Sidebar.</p> <p>21 MR. PANATIER: -- question about that.</p> <p>22 (Sidebar.)</p> <p>23 MR. PANATIER: I questioned Dr. Paoletti to</p> <p>24 documents that are in evidence. The first one was a</p> <p>25 letter from Dr. Ashton to Talc de Luzenac in France</p>

<p style="text-align: right;">Page 58</p> <p>1 discussing the Paoletti article. And then another 2 document where Dr. Ashton says we need to figure out 3 ways to compromise this. But I never cross-examined 4 him with the actual article.</p> <p>5 MS. SULLIVAN: I'm on direct, your Honor, 6 I'll rephrase.</p> <p>7 THE COURT: Okay. I'm sorry, he didn't 8 finish.</p> <p>9 MS. SULLIVAN: I'm sorry.</p> <p>10 MR. PANATIER: I would object to him now 11 interpreting published studies 'cause that is what this 12 is, and your Honor --</p> <p>13 THE COURT: What are you going to ask him?</p> <p>14 MS. SULLIVAN: He was at the company. How 15 did they interpret it? It's part of my direct.</p> <p>16 THE COURT: Okay. You need to create a 17 foundation that he was aware of it.</p> <p>18 MS. SULLIVAN: Of course.</p> <p>19 THE COURT: And I'll allow it and you can 20 redirect on it.</p> <p>21 MR. PANATIER: At this point, your Honor, I 22 just --</p> <p>23 THE COURT: Please stop leading.</p> <p>24 MR. PANATIER: That's all I was going to say.</p> <p>25 THE COURT: No.</p>	<p style="text-align: right;">Page 60</p> <p>1 some investigation and analysis related to this 2 article?</p> <p>3 A. They reviewed it and I think no action was 4 taken. There was nothing to be concerned about.</p> <p>5 Q. And do you know, Doctor, whether this 6 article has anything to do with Johnson &amp; Johnson 7 talcum powder?</p> <p>8 A. There's no mention of Johnson &amp; Johnson 9 talcum powder in the article. There's one of the mine 10 that Johnson &amp; Johnson sourced their talc from.</p> <p>11 Q. And it talks about, in addition to some 12 other mines, some Italian mines.</p> <p>13 Do you know, Dr. Hopkins, how many talc 14 mines there are in Italy?</p> <p>15 A. There are many. Many have closed down over 16 the years. But historically, there were very many 17 because the Alp region is rich in talc mining, and 18 also some of the upper mines, the mountain range that 19 runs down.</p> <p>20 So I certainly know there were over 50 at 21 one point in Vermont and Italy is considered bigger 22 than Vermont, so I'm not going to guess, but a lot.</p> <p>23 Q. Do you have any evidence that the talc 24 being tested here is J&amp;J talc or from J&amp;J Italian 25 mine?</p>
<p style="text-align: right;">Page 59</p> <p>1 MS. SULLIVAN: I'm just trying to get him out 2 of here, but I understand.</p> <p>3 THE COURT: We shouldn't have to be up here 4 leading and he shouldn't have to object every time. I 5 don't want to interrupt you with leading. Stop 6 leading.</p> <p>7 I mean, I realize you're trying to get him 8 out of here, but let's not lead.</p> <p>9 MS. SULLIVAN: Okay.</p> <p>10 (Sidebar ends.)</p> <p>11 BY MS. SULLIVAN:</p> <p>12 Q. Doctor, do you have the Paoletti article, 13 sir?</p> <p>14 A. I beg your pardon?</p> <p>15 Q. Do you have it?</p> <p>16 A. No. You didn't give me a Tab Number.</p> <p>17 Q. I'm sorry. Tab 294.</p> <p>18 A. Yes.</p> <p>19 Q. And, Doctor, were you familiar, this 20 article was published in 1984. You were responsible 21 for safety of talc at J&amp;J at the time, right?</p> <p>22 A. Yes. I was certainly around in 1984.</p> <p>23 Q. Were you familiar with this article?</p> <p>24 A. Yes, I was. Yeah.</p> <p>25 Q. And can you tell us, did the company do</p>	<p style="text-align: right;">Page 61</p> <p>1 A. There's nothing in this paper which 2 indicates it came from the Fontana mine that J&amp;J took 3 their talc from.</p> <p>4 Q. And, Doctor, I want to just ask you about 5 animal testing and actually an issue about lots.</p> <p>6 I want to show you Tab 269, Doctor, and 7 Tab 270. And this is, I believe this is a Plaintiff 8 Exhibit 3695-45.</p> <p>9 You have it?</p> <p>10 A. Tab Number?</p> <p>11 Q. This is Tab 269.</p> <p>12 A. Thank you.</p> <p>13 MR. PANATIER: No objection.</p> <p>14 THE COURT: Are you seeking admission?</p> <p>15 MS. SULLIVAN: I think it's in as a 16 Plaintiffs' Exhibit.</p> <p>17 MR. PANATIER: It is.</p> <p>18 THE COURT: Proceed.</p> <p>19 BY MS. SULLIVAN:</p> <p>20 Q. And, Doctor, this talks about X-ray 21 diffraction on a sample 228, right?</p> <p>22 A. Yes.</p> <p>23 Q. And it also talks about there's a note on 24 the flipside?</p> <p>25 A. Yeah.</p>

<p style="text-align: right;">Page 62</p> <p>1 Q. And it says, "It's to allot a thousand 2 cans set aside for everybody to do everything on 3 it."</p> <p>4 What is that about?</p> <p>5 A. It related to lot 228 P. A lot number is 6 generally the designation given to a day's production. 7 So, for example, October 22nd, they would produce a 8 lot and that would be given that day's production 9 code. So it relates to a lot produced on that day.</p> <p>10 And of that lot, the back note talks about 1,000 cans 11 set aside, so that would be a very much part of that 12 day's production.</p> <p>13 Q. And is there a reason the company would 14 set aside a specific lot for testing?</p> <p>15 MR. PANATIER: Calls for speculation.</p> <p>16 THE COURT: Sustained.</p> <p>17 BY MS. SULLIVAN:</p> <p>18 Q. Do you know, Doctor, you're a 19 toxicologist, did the company fund and conduct 20 animal testing?</p> <p>21 A. It's good practice if you're going to do any 22 test to understand the full profile of that product. 23 It's just good scientific practice so that you do 24 traceability. You do it with foods, many other 25 things. You can trace the history. So a lot was set</p>	<p style="text-align: right;">Page 64</p> <p>1 an analysis that Dr. Pooley did of the Italian 2 mines.</p> <p>3 Did he also do an analysis of Vermont 4 mines to assess the issue of asbestos in talcum 5 powder?</p> <p>6 A. Yes. He spent some time in the Vermont mine 7 and took rock samples of the areas that had been mined 8 and areas that had not been mined to understand the 9 geology of the Hammondsburg mine.</p> <p>10 Q. And I'd like to show you, going to Tab 18, 11 Doctor, Defense Exhibit 7046, and I'd like to move 12 it into evidence.</p> <p>13 MR. PANATIER: There won't be an objection to 14 this area.</p> <p>15 THE COURT: Okay. Admitted.</p> <p>16 Tab 18, right?</p> <p>17 MS. SULLIVAN: I believe so. Yes.</p> <p>18 Yeah, Tab 18.</p> <p>19 (Defense Exhibit 7046, Tab 18, was moved into 20 evidence.)</p> <p>21 BY MS. SULLIVAN:</p> <p>22 Q. Is this Dr. Pooley's report on the Vermont 23 mine?</p> <p>24 A. On the Vermont mine, yes.</p> <p>25 Q. And if we go to Dr. Pooley's conclusions</p>
<p style="text-align: right;">Page 63</p> <p>1 aside and you'd understand the profile of that 2 product.</p> <p>3 Q. And, Doctor, is there -- was that -- was 4 228 P, was that a production lot; in other words, it 5 was part of the regular production?</p> <p>6 A. Well, that would be the designation for that 7 particular day's production. 228 P was related to one 8 particular day's production.</p> <p>9 Q. And thank you, Doctor.</p> <p>10 I'm sorry, I want to go back. There was 11 some suggestion that J&amp;J set aside this lot as a 12 clean lot for testing.</p> <p>13 Is that fair?</p> <p>14 MR. PANATIER: Speculation.</p> <p>15 THE COURT: Sustained.</p> <p>16 BY MS. SULLIVAN:</p> <p>17 Q. Based on your experience and work at the 18 company, including familiarity with animal testing, 19 is that fair?</p> <p>20 MR. PANATIER: It's still speculation.</p> <p>21 THE COURT: Sustained. Move on.</p> <p>22 BY MS. SULLIVAN:</p> <p>23 Q. Doctor, I want to just go back to Vermont 24 for a minute.</p> <p>25 And did Dr. Pooley, our jurors have seen</p>	<p style="text-align: right;">Page 65</p> <p>1 on page 48, can you tell our jurors whether 2 Dr. Pooley found any asbestos in the Vermont mine?</p> <p>3 A. He does not report finding asbestos.</p> <p>4 Q. And does he look with electron microscopy 5 and also polarized light microscopy, right?</p> <p>6 A. Yes.</p> <p>7 Q. And he says no fibrous components were 8 observed?</p> <p>9 A. He does, yes.</p> <p>10 MR. PANATIER: Leading, your Honor.</p> <p>11 THE COURT: Sustained.</p> <p>12 BY MS. SULLIVAN:</p> <p>13 Q. Can you tell our jury what Dr. Pooley 14 found?</p> <p>15 A. He said the amphibole minerals were found in 16 discrete locations and not disseminated throughout the 17 talc ores and not asbestiform in character.</p> <p>18 Serpentine mineral was found in specimens located at 19 the center of the ore body, but no fibrous components 20 were observed.</p> <p>21 Q. What does that mean that no fibrous 22 components were observed in the ore body and the 23 center of the ore body?</p> <p>24 A. He did not find -- well, if he had found 25 serpentine mineral fibers it would be chrysotile, but</p>

1 he did not find fibrous serpentine, so he did not find 2 asbestos. 3 Q. And what does it mean, he didn't find it 4 in the center of the ore body? 5 A. It just means he did not find asbestos. 6 Q. Doctor, are you also aware that the 7 Government did testing on Vermont mines, including 8 J&J's? 9 A. They did. Yes. 10 Q. I want to show you Tab 73. And this is 11 Defense Exhibit 9041. 12 May I publish? 13 MR. PANATIER: Yes. No objection. 14 THE COURT: Proceed. 15 BY MS. SULLIVAN: 16 Q. Doctor, Defense Exhibit 9041, is this the 17 report of NIOSH, the National Institute of 18 Occupational Safety and Health, and Harvard's 19 testing of Vermont mines including J&J's mine? 20 A. It is. Yes. 21 Q. And the paper talks about the fact -- does 22 the paper mention what the Government and what NIOSH 23 did to analyze whether there was asbestos in the 24 Vermont mine? 25 A. They took samples of materials and examined	Page 66 1 plaintiffs, in opening statement and I think 2 throughout this trial, put up some boards, and did 3 we show you copies of those boards, about what they 4 claim are positive test results. And I'd like to 5 put up -- counsel, any objection to me showing your 6 board? 7 MR. PANATIER: No. 8 BY MS. SULLIVAN: 9 Q. I'd like to put up, for example, they 10 showed our jurors boards like this, right? 11 A. Okay. 12 Q. And have you actually looked at the 13 underlying documents referenced here as part of your 14 preparation -- 15 A. I believe so. Yes. 16 Q. And can you tell our jurors, and we'll go 17 through some of the documents, can you tell our 18 jurors, based on your review of the actual 19 documents, do any of these support the notion that 20 there's asbestos in Johnson & Johnson's talcum 21 powder? 22 A. Yeah. Based on my review of those reports, 23 none of them would support the contention that there 24 would be asbestos present in the powder. 25 Q. All right. And I just want to -- let's
Page 67 1 them by appropriate techniques. 2 MR. PANATIER: Your Honor, this was all asked 3 and answered on the 25th. Page 229. 4 THE COURT: Sidebar. 5 (Sidebar.) 6 THE COURT: Are you disputing whether or not 7 you covered this already? 8 MS. SULLIVAN: I don't believe I covered 9 this. 10 MR. PANATIER: Look. Found a study, I 11 objected, found a NIOSH study, on and on and on about 12 it, the confusion section, no asbestos found, all of 13 these. 14 MS. SULLIVAN: I'll move on, your Honor. 15 THE COURT: Thank you. 16 MS. SULLIVAN: Can I just ask him do they 17 conclude there was asbestos? 18 THE COURT: You've already covered the 19 conclusions, so move on. 20 (Sidebar ends.) 21 BY MS. SULLIVAN: 22 Q. I forgot I already asked you about this. 23 I'm sorry, Dr. Hopkins. I'm sorry, jurors. It's 24 been a while. 25 Doctor, I want to switch topics to the	Page 69 1 walk through some of these reports and talk about 2 what we're looking at here. 3 So the first, the first several reports 4 relate to Battelle, right? 5 A. Yes. Battelle is an independent test 6 facility. 7 Q. And first, Doctor, we already talked about 8 is amphibole, is a finding of amphibole, is that 9 asbestos? 10 A. Not unless you confirm it's asbestos. 11 Amphibole is a rock form which is pretty well anywhere 12 around the world. 13 Q. And tremolite, is that asbestos? 14 A. Not unless it says tremolite asbestos. 15 Q. And if we look at the Battelle reports 16 here, what they're reporting, do any of the Battelle 17 reports say asbestos? 18 A. I've read the Battelle reports. I could not 19 find the word asbestos in any of those describing 20 tremolite asbestos. 21 Q. And looking at -- so, for example, it says 22 here that Battelle found fibrous amphibole, right? 23 A. It does. Yes. 24 Q. But if you look at the actual report, it 25 says fibrous talc and amphibole, right?

<p style="text-align: right;">Page 70</p> <p>1 MR. PANATIER: Your Honor, just for 2 clarification, it says, "and fibrous particles of talc 3 and amphibole."</p> <p>4 MS. SULLIVAN: Yeah. "Fibrous particles of 5 talc and amphibole," right.</p> <p>6 THE COURT: For the record, could you give 7 the identification of this document?</p> <p>8 MS. SULLIVAN: Sure. Defense Exhibit 8382</p> <p>9 THE COURT: Thank you.</p> <p>10 BY MS. SULLIVAN:</p> <p>11 Q. I'm sorry, Doctor, do you have your 12 testing binder?</p> <p>13 A. I just found it here, yes.</p> <p>14 Q. And this should be Tab --</p> <p>15 A. Tab 3.</p> <p>16 Q. Defense number is 8382.</p> <p>17 Do any of the Battelle documents talk 18 about asbestos or mention asbestos?</p> <p>19 A. I read the documents. I could not find that 20 they reported finding asbestos.</p> <p>21 Q. And so, and in fact, the Battelle reports, 22 if we look at them, do they mention --</p> <p>23 THE COURT: So, for the record, what are you 24 now putting up there?</p> <p>25 MS. SULLIVAN: I'm sorry, this is Plaintiffs'</p>	<p style="text-align: right;">Page 72</p> <p>1 Q. And do they ever say tremolite asbestos?</p> <p>2 A. Again, I have not seen the word tremolite 3 asbestos.</p> <p>4 Q. And then in the 661 report it says altered 5 amphibole. Is that asbestos?</p> <p>6 A. Again, it's a mineralogical statement. I 7 have not seen the word asbestos associated with 8 altered amphibole, so I am not going to comment any 9 more than that, but it does not say asbestos.</p> <p>10 Q. Okay. And see what I've got here. 10/13. 11 So looking at 10/13/61, it says, "Trace 12 tremolite and amphiboles," quote, "usual 13 contaminants," right?</p> <p>14 And if we look at Tab TB 12, Plaintiffs' 15 Exhibit 25834, and this is page 1015.</p> <p>16 Again, Doctor, does it say asbestos?</p> <p>17 A. I need to read the --</p> <p>18 Q. I'm sorry. That's what we have.</p> <p>19 A. I don't see the word asbestos there.</p> <p>20 Q. It talks about, quote, unquote, 21 contaminants being these trace tremolite carbonates, 22 et cetera, right?</p> <p>23 A. It does. Yes.</p> <p>24 Q. And is trace tremolite asbestos?</p> <p>25 A. Not unless it says tremolite asbestos.</p>
<p style="text-align: right;">Page 71</p> <p>1 Exhibit 1041, TB 5, Dr. Hopkins.</p> <p>2 THE COURT: Thank you.</p> <p>3 BY MS. SULLIVAN:</p> <p>4 Q. But, Doctor, if you look at this, what 5 does it say in terms of whether there's asbestos 6 in --</p> <p>7 A. Can you give me the page number?</p> <p>8 Q. Sure. This is TB 5, TB 5.</p> <p>9 A. Yeah.</p> <p>10 Q. And this is page 1382, or page 9 at the 11 top.</p> <p>12 A. Okay.</p> <p>13 Q. What does that say on the issue of whether 14 Battelle found asbestos?</p> <p>15 A. No. They don't mention, like I say, I have 16 not seen the word asbestos at this part of the 17 results. They describe it as trace of tremolite.</p> <p>18 Q. And so these tests, Doctor, do any of 19 these tests report asbestos in talc?</p> <p>20 A. I have not found that statement in any of 21 the reports there's a finding of asbestos. They 22 report the minerals, but they do not use the word 23 asbestos.</p> <p>24 Q. They talk about tremolite, right?</p> <p>25 A. That's one of the minerals, yes.</p>	<p style="text-align: right;">Page 73</p> <p>1 Q. Because, as you told our jury, there's two 2 kinds, right?</p> <p>3 A. Yes, there are.</p> <p>4 Q. And again, is amphibole asbestos?</p> <p>5 A. Not unless it's confirmed by polarized light 6 or transmission microscopy.</p> <p>7 Q. And can you tell us what amphibole refers 8 to?</p> <p>9 A. Amphibole just refers to the X-ray 10 diffraction picture you get, which is the chemical 11 composition.</p> <p>12 Q. And then if we look at 4766, it talks 13 about serpentine altered amphibole?</p> <p>14 A. What Tab Number is that?</p> <p>15 Q. I'm sorry. This is TB 14.</p> <p>16 And first, are you there, Doctor?</p> <p>17 A. Yes.</p> <p>18 Q. On page 6693. It talks about serpentine 19 and altered amphibole, right?</p> <p>20 A. Give me a second.</p> <p>21 Yes. It describes the mineralogical 22 composition of the ore.</p> <p>23 Q. Does it say asbestos?</p> <p>24 A. It does not mention asbestos. No.</p> <p>25 Q. And if you turn the page, it says, I'm</p>

<p style="text-align: right;">Page 74</p> <p>1 sorry, it says, "X-ray analysis of the unleached 2 concentrate showed only talc to be present in 3 determinable amounts with no indication of 4 serpentine."</p> <p>5 What does that say on the issue of whether 6 they found asbestos?</p> <p>7 A. They do not report finding asbestos.</p> <p>8 Q. Do they actually report -- do they report 9 the opposite?</p> <p>10 A. It says they found no serpentine, which is 11 one form of asbestos, chrysotile serpentine could be, 12 but they did not find it.</p> <p>13 Q. And then they've got some documents here 14 from 7/13/66 -- in any event, Doctor, we'll find 15 them.</p> <p>16 But this says tremolite and tremolite, 17 right?</p> <p>18 A. Yes. It says, they quote tremolite, yes.</p> <p>19 Q. And you've looked at those documents.</p> <p>20 Do they say asbestos?</p> <p>21 A. These are ancient samples. Yes. I've 22 looked at those documents. They do not.</p> <p>23 Q. And these are from bottles, in any event, 24 that the plaintiffs here would have never used 25 because they're from the 1920s and '30s, right?</p>	<p style="text-align: right;">Page 76</p> <p>1 it say here, Doctor?</p> <p>2 A. It's an internal memorandum from Mr. Ashton 3 to Dr. Hildick-Smith, the MD, medical director. He 4 says that, "We consider the pre non-talc needles but a 5 trace both on a count and area basis. Those particles 6 are tremolite."</p> <p>7 Q. And what does that mean on the issue of 8 whether this is asbestos?</p> <p>9 MR. PANATIER: Objection, your Honor. This 10 calls for speculation.</p> <p>11 THE COURT: Sustained.</p> <p>12 BY MS. SULLIVAN:</p> <p>13 Q. Doctor, does this document say asbestos?</p> <p>14 A. The document does not use the word asbestos 15 at any point.</p> <p>16 Q. And if we go to the actual testing 17 reporting talks about non-talc needles, right?</p> <p>18 A. Yes, it does.</p> <p>19 Q. And there is a -- there is a follow-up 20 report here, that was tab -- again, Doctor, does 21 this report say anything about asbestos -- I'm 22 sorry. I have it.</p> <p>23 Does it say anything about asbestos?</p> <p>24 A. The report does not use the word asbestos.</p> <p>25 Q. And if we look at Defense Exhibit 7014 in</p>
<p style="text-align: right;">Page 75</p> <p>1 A. Yes.</p> <p>2 MR. PANATIER: Leading, your Honor.</p> <p>3 THE COURT: Sustained. Please stop leading.</p> <p>4 BY MS. SULLIVAN:</p> <p>5 Q. Assume, Doctor, for purposes of my 6 question, the earliest was in the '50s, would any 7 of -- in terms of their use, would any of them have 8 used these bottles?</p> <p>9 A. If they're manufactured in the 1930s, that 10 would be unlikely.</p> <p>11 Q. And then this says tremolite; does it 12 say --</p> <p>13 A. Just says tremolite, yes.</p> <p>14 Q. And then did you look at this entry of 15 1/30/67, is that even a J&amp;J product?</p> <p>16 A. No. It's described as a competitive 17 product.</p> <p>18 Q. Then if we go to this chart here.</p> <p>19 And again, we have Battelle saying 20 tremolite. Is that asbestos?</p> <p>21 A. Not unless it says tremolite asbestos.</p> <p>22 Q. And if we go to 5/10/71, it talks about 23 tremolite needles. And if we look at page, if we 24 look at this document and the test results, Doctor, 25 this is Tab TB 55, Plaintiff Exhibit 2372; what does</p>	<p style="text-align: right;">Page 77</p> <p>1 the same tab, does it have a follow-up report as to 2 whether those non-talc needles are asbestos or not?</p> <p>3 A. What page is that?</p> <p>4 Q. Should be the same tab. TB 19.</p> <p>5 THE COURT: Are we going to a different 6 document?</p> <p>7 MS. SULLIVAN: Yeah. It should be in the 8 same --</p> <p>9 MR. NOLAN: TB 19 and then A.</p> <p>10 MS. SULLIVAN: Same tab, your Honor. Same 11 tab. TB 19. It's behind the original report.</p> <p>12 BY MS. SULLIVAN:</p> <p>13 Q. This is a follow-up, Doctor, from the 14 Colorado School of Mines on the same testing sample?</p> <p>15 A. What page? What Bates number, please?</p> <p>16 Q. This should be the second document in the 17 tab, and this is page 1.</p> <p>18 A. I have it. Yes.</p> <p>19 Q. And can you tell us what the Colorado 20 School of Mines is reporting on these non-talc 21 needles?</p> <p>22 A. Yes. They state that "In regard to the 23 non-talc needles noted in the point count report of 24 June 24, 1971, it's now believed that many of these 25 could actually have been rolled up plates that yielded</p>

1 anomalous shapes in the optical properties." 2 Q. What does that mean? 3 A. As I said yesterday, if you roll up a plate 4 of talc, it can look like a needle under a microscope. 5 Q. Talc. 6 So, Doctor, did the Colorado School of 7 Mines report asbestos in this analysis? 8 A. They have not reported asbestos. No. 9 Q. And if we look, continuing on, Doctor, the 10 next one says tremolite and actinolite. 11 Does that say asbestos? 12 A. Not unless it says tremolite or actinolite 13 asbestos. 14 Q. And have you talked about whether there 15 are two kinds of tremolite and actinolite, 16 asbestosiform and not? 17 A. Yes. There's the asbestos form and the 18 non-asbestos forms of those minerals. 19 Q. And our jurors have heard a lot about 20 Dr. Langer and Mount Sinai. 21 Can you tell us in his final published 22 paper, did he find asbestos in Johnson & Johnson's 23 talcum powder? 24 A. In his published paper with Dr. Rohl in 25 1976, he did not report finding asbestos in the four	Page 78  1 you have been doing. 2 MS. SULLIVAN: But can I ask him did J&J -- 3 he knows. He's a toxicologist. He knows about it. 4 MR. PANATIER: He has zero training in 5 asbestos whatsoever. He is not here as an expert. 6 MS. SULLIVAN: He has education and 7 experience for decades. 8 THE COURT: Stop. Stop. Stop. Argue to the 9 court, not to each other. 10 He does not have the training for that. He 11 can read a document as part of his role as a corporate 12 designee and in his role as a safety toxicology expert. 13 Go. 14 (Sidebar ends.) 15 BY MS. SULLIVAN: 16 Q. Doctor, moving on to 8671, and this would 17 be TB 56. 18 Does this actually -- can you tell us 19 whether this relates to product or ore or something 20 else? 21 A. Let me read it. 22 Q. Sure. 23 A. Yeah. The first, first sentence of the 24 letter said, "I've shipped one drum of Italian rock 25 from the Crosetto mine in the Chisone Valley of the
Page 79  1 samples he tested of Johnson's Baby Powder and Shower 2 to Shower. 3 Q. And again, this is amphiboles. Is that 4 asbestos? 5 A. No. Amphibole just describes -- 6 MR. PANATIER: Your Honor, speculation. The 7 documents say what they say. 8 THE COURT: Sidebar. 9 (Sidebar.) 10 MR. PANATIER: Your Honor, if counsel wants 11 to continue to show documents and ask whether a word 12 appears, that's fine, but she continually is asking him 13 is that asbestos, and he is utterly unqualified to do 14 that. That's expert testimony. 15 MS. SULLIVAN: First, he's a toxicologist. 16 He's a corporate rep who interpreted the word 17 amphibole. It's already been established amphibole 18 does not necessarily mean asbestos. And, in fact, most 19 amphiboles are not asbestos. 20 THE COURT: You can refer him to specific 21 documents, but to just look at a phrase, you haven't 22 testified with regard to a word without putting it in 23 context of the document -- 24 MS. SULLIVAN: I -- 25 THE COURT: So take him to the document as	Page 81  1 Italian Alps," which is -- the J&J was from the 2 Fontana mine. 3 Q. Is this even J&J's mine? 4 A. No. It's a different mine. J&J took their 5 talc from the Fontana mine. This relates to the 6 Crosetto mine, wherever that is. 7 Q. Then, Doctor, looking at 8971, it talks 8 about fines implicated in asbestos toxicology. 9 Is this even a test report, looking at Tab 10 57? 11 A. No. It appears to be a memorandum from the 12 research director, Tom Shelley, to a couple of people, 13 and he's commenting on the need to avoid fines. 14 Q. What are fines, Dr. Hopkins, based on your 15 experience and understanding? 16 A. Fines are when you've done your flotation, 17 the large particles rise to the top, but fines are the 18 small bits that sink to the bottom. 19 Q. And are fines asbestos? 20 A. No. Fines -- well, fines would generally be 21 regarded as talc. It's any small particle, it could 22 be chalk, quartz, various things that -- small, fine 23 bits that you don't want in your product. 24 Q. So does this document that they have on 25 their chart as evidence of asbestos in talc even say

<p style="text-align: right;">Page 82</p> <p>1 anything about asbestos?</p> <p>2 MR. PANATIER: Your Honor, I'm going to 3 object to that. The document speaks for itself.</p> <p>4 THE COURT: Sustained.</p> <p>5 BY MS. SULLIVAN:</p> <p>6 Q. Doctor, does this document mention 7 asbestos?</p> <p>8 A. It does not.</p> <p>9 MR. PANATIER: Your Honor, the word is right 10 there.</p> <p>11 THE COURT: Redirect.</p> <p>12 BY MS. SULLIVAN:</p> <p>13 Q. It talks about asbestos toxicology, right, 14 Doctor?</p> <p>15 A. It talks about asbestos toxicology, which is 16 separate from the product.</p> <p>17 Q. And this is August 9.</p> <p>18 And then if we go to McCrone, 9/3/71, it 19 talks about actually medicated powder, right?</p> <p>20 A. Can you give me the Tab Number?</p> <p>21 Q. I'm sorry. This is tab, Tab 24, 22 Plaintiffs' Exhibit 2398.</p> <p>23 A. It is in this book?</p> <p>24 THE COURT: Yes. In that book.</p> <p>25 A. Thank you.</p>	<p style="text-align: right;">Page 84</p> <p>1 of the asbestos minerals in any of them. In 2 particular, there are no bundles of chrysotile 3 fibers."</p> <p>4 Q. And do they go on to say, "There is a 5 possibility of contamination by approximately one 6 fiber in our lab"?</p> <p>7 A. They report that. Yes. Due to some 8 processing.</p> <p>9 Q. And can you tell our jurors, what was 10 McCrone's conclusion as to whether any of these 11 products had asbestos, based on their analysis?</p> <p>12 A. Let me just read the document.</p> <p>13 They concluded that the products were free 14 from asbestos.</p> <p>15 Q. We talked about Dr. Langer and his final 16 paper, right, Dr. Hopkins?</p> <p>17 A. We did. Yes.</p> <p>18 Q. And this is -- does this even -- this 2/72 19 entry talks about -- all of these talk about 20 tremolite, right?</p> <p>21 A. Can you raise it?</p> <p>22 Q. Oh, I'm sorry.</p> <p>23 A. Thank you. Yes, it does use the word 24 tremolite.</p> <p>25 Q. Do any of these documents that you've</p>
<p style="text-align: right;">Page 83</p> <p>1 THE COURT: That's okay.</p> <p>2 A. Okay.</p> <p>3 Q. And does this -- and, Doctor, do you know 4 whether any of our plaintiffs in this case even used 5 medicated J&amp;J powder?</p> <p>6 A. I have -- I do not know --</p> <p>7 Q. Fair enough.</p> <p>8 A. -- one way or the other.</p> <p>9 Q. Fair enough.</p> <p>10 Doctor, if we look at, there's some 11 testing here that talks about finding one fiber of 12 chrysotile, right?</p> <p>13 A. That's what is reported. Yes.</p> <p>14 Q. And is there, if you turn the page, is 15 there additional testing and summary of that 16 additional testing, right?</p> <p>17 A. Yes. There's a summary of the testing that 18 was conducted. Yes.</p> <p>19 Q. And can you tell our jurors whether 20 McCrone found asbestos in any of these three 21 products, J&amp;J talc, Shower to Shower, and medicated 22 powder and feminine aerosol spray in the document 23 they have on their chart?</p> <p>24 A. What the lab stated was "These products all 25 seemed to be quite clean. We did not find any fibers</p>	<p style="text-align: right;">Page 85</p> <p>1 reviewed actually say asbestos?</p> <p>2 A. I've reviewed those documents. They do not 3 say asbestos, no. They use the word tremolite.</p> <p>4 Q. And we talked about Dr. Hutchinson and the 5 Minnesota Space Center to our jurors, right?</p> <p>6 A. We did, yes.</p> <p>7 Q. Did you speak about the testing by McCrone 8 and Dr. Pooley with TEM?</p> <p>9 A. Yes. On the same sample. Yes.</p> <p>10 Q. And did those test labs find asbestos?</p> <p>11 A. The other test labs did not find asbestos.</p> <p>12 Q. And then, Doctor, running through this, 13 Doctor, quickly, if we could.</p> <p>14 Again, we've got tremolite, actinolite, 15 tremolite type, is this -- looking at these two 16 tests, is that asbestos tremolite or actinolite?</p> <p>17 A. Not unless it says asbestos.</p> <p>18 Q. And did those documents say asbestos, 19 those test documents?</p> <p>20 A. Can we refer to them, just to refresh me?</p> <p>21 Q. We can. We have to get back to that, 22 Doctor. I want 419 and 427. Jack will get them for 23 us.</p> <p>24 Then, Doctor, if we look at -- this is TB 25 32, and if we look at the document does it say</p>

<p style="text-align: right;">Page 86</p> <p>1 tremolite on page 1?</p> <p>2 A. I'm reading it. Yeah. One minute.</p> <p>3 Yeah. It just says tremolite.</p> <p>4 Q. Does it mention asbestos?</p> <p>5 A. No. It does not. It just describes the word tremolite.</p> <p>7 MR. PANATIER: Your Honor, optional completeness?</p> <p>9 THE COURT: Sure.</p> <p>10 MR. PANATIER: "Four of these samples are suspected of containing tremolite based on the finding of one or two fibers per sample which satisfy the color/morphology criteria."</p> <p>14 That's all, your Honor.</p> <p>15 THE COURT: Thank you.</p> <p>16 BY MS. SULLIVAN:</p> <p>17 Q. Does that mean asbestos?</p> <p>18 MR. PANATIER: Your Honor, that's an objection.</p> <p>20 THE COURT: Sustained.</p> <p>21 BY MS. SULLIVAN:</p> <p>22 Q. Does that say asbestos, Dr. Hopkins?</p> <p>23 A. The word asbestos does not appear on this result, this test result.</p> <p>25 Q. And, Doctor, is actinolite asbestos?</p>	<p style="text-align: right;">Page 88</p> <p>1 asbestos by doing this with Italian talc. They find 2 Pooley .05 of the tremolite type in Vermont."</p> <p>3 Right?</p> <p>4 A. That's what is written, yes.</p> <p>5 Q. Are they reporting the tremolite type is 6 asbestos?</p> <p>7 MR. PANATIER: Your Honor, that calls for 8 speculation.</p> <p>9 THE COURT: Sustained.</p> <p>10 BY MS. SULLIVAN:</p> <p>11 Q. Do you know, Dr. Hopkins, if Dr. Pooley ever found asbestos in J&amp;J's finished product?</p> <p>13 A. I'm not aware that he's ever reported 14 finding asbestos.</p> <p>15 Q. Jack's telling me that -- Jack is 16 suggesting that this might be a typo and this 17 probably is '73 'cause it's a '73 before and there's 18 a '73 after.</p> <p>19 So let's look at 4/27/73, and this is 20 Plaintiffs' Exhibit 2454.</p> <p>21 Doctor, if you could just look on the 22 board, does that say asbestos?</p> <p>23 A. No. They said it identifies particles close 24 to actinolite and tremolite.</p> <p>25 Q. Yeah.</p>
<p style="text-align: right;">Page 87</p> <p>1 A. It can be asbestos or it can be non-asbestos form.</p> <p>3 Q. And does this report asbestos?</p> <p>4 THE COURT: Are you still on the same document, counsel?</p> <p>6 MS. SULLIVAN: No. We're on 4/27/72.</p> <p>7 THE COURT: Okay. The witness is still looking at the same document, so maybe you should refer him to the right document.</p> <p>10 A. Give me the number of the document, please.</p> <p>11 Q. This is -- let's skip back to it and we'll look for it.</p> <p>13 Doctor, if we can go to TB, I don't know if we have the Tab Number here, it says Plaintiff Exhibit 1096. You've seen this document, Doctor.</p> <p>16 If you could just look on your screen.</p> <p>17 Our jurors have seen this. This says tremolite type, does it?</p> <p>19 THE COURT: For the record, what's the marking on that?</p> <p>21 MS. SULLIVAN: This is Plaintiff Exhibit 1096.</p> <p>23 THE COURT: Thank you.</p> <p>24 BY MS. SULLIVAN:</p> <p>25 Q. It says, "They find no, quote, unquote,</p>	<p style="text-align: right;">Page 89</p> <p>1 A. Yeah.</p> <p>2 MR. PANATIER: Can I just see your copy?</p> <p>3 MS. SULLIVAN: It's your exhibit.</p> <p>4 MR. PANATIER: I know. Thank you.</p> <p>5 BY MS. SULLIVAN:</p> <p>6 Q. Doesn't mention asbestos in this document at all?</p> <p>8 A. No.</p> <p>9 Q. And then, Doctor, we have more tremolite, tremolite, right?</p> <p>11 A. Yes. There are two more mentions of the word tremolite.</p> <p>13 Q. Which you have told us could be either regular old tremolite or asbestos, right?</p> <p>15 A. Yes.</p> <p>16 Q. And does this say asbestos?</p> <p>17 A. It does not say asbestos.</p> <p>18 Q. And then if we look at 10/29/73.</p> <p>19 Doctor, September 13, '73, again talks about actinolite, right?</p> <p>21 A. That's what's written, yes.</p> <p>22 Q. And tremolite?</p> <p>23 A. That is, again, what is on the board.</p> <p>24 Q. Doesn't mention asbestos?</p> <p>25 A. It does not mention asbestos.</p>

<p>1 Q. And you've talked about how there's two 2 types of this?</p> <p>3 A. Yes. The asbestos form and the non-asbestos 4 form.</p> <p>5 Q. And then, Doctor, are you familiar with 6 this Dutch thing?</p> <p>7 A. Yes.</p> <p>8 Q. Is that even -- can you tell our jurors 9 whether that's even a test?</p> <p>10 A. It was a study done by a Dutch consumer 11 organization on a sample of talc and they sent it away 12 for evaluation.</p> <p>13 Q. And can you tell us what, looking at -- 14 can you tell us what the issue was with the Dutch 15 consumer organization?</p> <p>16 A. Yeah. They very simply measured the 17 chemical structure, which was magnesium silicate, and 18 looked at it under the microscope and showed what 19 there appear to be fibers, but the fibers were exactly 20 construction of talc. So what they were observing 21 were talc fibers.</p> <p>22 Q. And if we look at a follow-up document in 23 September of '73, and, Doctor, this is in TB 38. 24 This is Defense Exhibit 7070. Move into evidence. 25 THE COURT: 70 what?</p>	<p>Page 90</p> <p>1 document in part C?</p> <p>2 A. What Bates Number page are we on?</p> <p>3 Q. This is 1475. The document that 4 Miss Sampson just handed you. If you could read 5 part C to our jurors?</p> <p>6 A. "The talc they're using, the Italian five 7 zeros, has been thoroughly analyzed by different 8 scientists in different countries by different 9 methods, and no detectable levels of asbestos have 10 been found."</p> <p>11 Q. And does it go on to talk about the Dutch 12 definition that they were using for asbestos?</p> <p>13 A. It does. Yes. That was the concern.</p> <p>14 Q. And can you tell us what happened here?</p> <p>15 A. May I read it? Yeah.</p> <p>16 "By this definition, if the talc or the 17 common mineral impurity chlorite, a magnesium 18 silicate, appeared to look fibrous by their analytical 19 technique, then it would be called asbestos. However, 20 if, for example, tremolite or anthophyllite or 21 asbestos were present from the fibrous form, then by 22 their definition it would not be called asbestos since 23 they have elements other than just magnesium and 24 silicon. Tremolite is a calcium magnesium silicate 25 and anthophyllite is a magnesium iron silicate."</p>
<p>1 MR. PANATIER: No objection.</p> <p>2 MS. SULLIVAN: 7070.</p> <p>3 THE COURT: Admitted.</p> <p>4 (Defense Exhibit 7070, Tab 38, was moved into 5 evidence.)</p> <p>6 BY MS. SULLIVAN:</p> <p>7 Q. And it talks about the definition issue, 8 does it?</p> <p>9 A. Yeah. Can you give me the Tab Number again?</p> <p>10 Q. Sure.</p> <p>11 That's Tab Number TB 38. It's probably 12 the second document in the mix.</p> <p>13 THE COURT: We don't have a 38.</p> <p>14 A. I don't have a 38.</p> <p>15 THE COURT: It's coming right now.</p> <p>16 MS. SULLIVAN: I'm sorry, your Honor.</p> <p>17 THE COURT: That's all right.</p> <p>18 Thank you.</p> <p>19 BY MS. SULLIVAN:</p> <p>20 Q. You have it, Doctor?</p> <p>21 A. I do, yes.</p> <p>22 Q. Does it talk about an issue with 23 definitions?</p> <p>24 A. That was the concern, yes.</p> <p>25 Q. Can you tell us what it also says in this</p>	<p>Page 91</p> <p>1 Q. So what's going on there, Dr. Hopkins?</p> <p>2 A. Well, if proper asbestos had been there, 3 their method would not have discovered it. But what 4 they were observing was talc.</p> <p>5 MR. PANATIER: Your Honor, this is outside 6 the scope of testimony.</p> <p>7 THE COURT: Sustained. The jury is to 8 disregard that testimony.</p> <p>9 BY MS. SULLIVAN:</p> <p>10 Q. Doctor, the -- did the company find -- 11 reading C, can you tell us whether the company found 12 asbestos in their Italian talc?</p> <p>13 A. They did not.</p> <p>14 Q. And if you go to, this is more tremolite, 15 anthophyllite, right?</p> <p>16 A. Yes.</p> <p>17 Q. Does it say asbestos?</p> <p>18 A. No. Just says tremolite, possibly 19 anthophyllite.</p> <p>20 Q. Same with Dr. Reynolds, it talks about 21 actinolite and anthophyllite, fiber form, right?</p> <p>22 A. That's the description given, yes.</p> <p>23 Q. Is that asbestos?</p> <p>24 A. It doesn't state asbestos.</p> <p>25 Q. And then we go to chrysotile times four</p>

<p style="text-align: right;">Page 94</p> <p>1 here, and 5/14/74, and is that the document we just 2 looked at, the spiked samples?</p> <p>3 A. Can you give me the tab reference, please?</p> <p>4 Q. Sure. TB 58.</p> <p>5 MR. PANATIER: Your Honor, objection.</p> <p>6 Cumulative, and also attorney testifying.</p> <p>7 THE COURT: You already covered this area. 8 Move on.</p> <p>9 MS. SULLIVAN: I just was confirming --</p> <p>10 THE COURT: We've covered this area. Move 11 on.</p> <p>12 MS. SULLIVAN: But, your Honor, I didn't 13 cover it with respect to the chart.</p> <p>14 THE COURT: Sidebar.</p> <p>15 MS. SULLIVAN: I'm happy to move on. I'm 16 just confirming this is the spiked sample.</p> <p>17 THE COURT: Sidebar. Sidebar. 18 The jury will disregard that comment. 19 (Sidebar.)</p> <p>20 MR. PANATIER: My objection is this is 21 cumulative. It's asked and answered repeatedly. And 22 also my objection is that counsel for Johnson &amp; Johnson 23 is continually injecting her own opinion to these 24 questions. It isn't based on the evidence at all. 25 If she wants to establish that some samples</p>	<p style="text-align: right;">Page 96</p> <p>1 break.</p> <p>2 So leave your notebooks here. Please 3 remember the court's instructions, and be back -- be 4 ready to come back five of.</p> <p>5 You know what, make it a ten-minute break and 6 leave it here on the floor.</p> <p>7 Okay. Thank you.</p> <p>8 Counsel, can I see you at sidebar. 9 (There is a discussion off the record.)</p> <p>10 (Recess: 11:42 a.m. to 11:51 a.m.)</p> <p>11 COURT OFFICER: Jury's entering. 12 (Jury enters.)</p> <p>13 THE COURT: Please be seated. Make sure cell 14 phones are turned off.</p> <p>15 BY MS. SULLIVAN:</p> <p>16 Q. Doctor, we talked about the last two 17 entries of May 14, '74.</p> <p>18 Did we already discuss with our jury the 19 research protocol and the reagent sample?</p> <p>20 MR. PANATIER: Your Honor, I think there's a 21 ruling on this.</p> <p>22 THE COURT: There is one question you were 23 going to ask on that, counsel.</p> <p>24 MS. SULLIVAN: Yeah.</p> <p>25 BY MS. SULLIVAN:</p>
<p style="text-align: right;">Page 95</p> <p>1 there were spiked, that's fine. She's already done 2 that.</p> <p>3 THE COURT: We've covered this document. 4 Let's move on.</p> <p>5 MS. SULLIVAN: Can I just --</p> <p>6 THE COURT: We've covered it.</p> <p>7 MS. SULLIVAN: Okay.</p> <p>8 THE COURT: Hold on. Come back. I 9 apologize. Just state what you wanted to do on the 10 record for purposes --</p> <p>11 MS. SULLIVAN: I just wanted to say we've 12 already covered that this involved samples that were 13 spiked.</p> <p>14 THE COURT: Okay. We're going to move on, 15 you've covered it.</p> <p>16 MR. PANATIER: That's a leading question.</p> <p>17 THE COURT: Yes. 18 (Sidebar ends.)</p> <p>19 BY MS. SULLIVAN:</p> <p>20 Q. Doctor, we've already covered --</p> <p>21 THE COURT: We've already covered that. Move 22 on.</p> <p>23 BY MS. SULLIVAN:</p> <p>24 Q. Doctor --</p> <p>25 THE COURT: Hold on. Let's take a 15-minute</p>	<p style="text-align: right;">Page 97</p> <p>1 Q. So --</p> <p>2 THE COURT: You've already covered that. 3 That was the question. Thank you.</p> <p>4 BY MS. SULLIVAN:</p> <p>5 Q. And then, Doctor, I want to go back to the 6 Johns-Manville one now, found at Tab 36, Plaintiffs' 7 Exhibit 1056. And that's an entry here, chrysotile?</p> <p>8 THE COURT: Does that document have a marking 9 for purposes of identification?</p> <p>10 MS. SULLIVAN: It's Plaintiffs' Exhibit 1056.</p> <p>11 MR. PANATIER: It's not in evidence, but 12 we'll offer it.</p> <p>13 MS. SULLIVAN: No objection.</p> <p>14 THE COURT: Admitted. 15 (Plaintiff's Exhibit 1056 was moved into 16 evidence.)</p> <p>17 THE COURT: Did you find it, Doctor?</p> <p>18 A. I do. Yes. Thank you.</p> <p>19 Q. And if we go to, Doctor, if you look at 20 the document on page, looks like page 3, page 2, 21 talks about Johnson's Baby Powder, right?</p> <p>22 A. Yes. I have the table. Yes.</p> <p>23 Q. And it says that it might be, the 24 chrysotile finding, what does it say here?</p> <p>25 A. It quotes chrysotile by volume, PPM 3,000.</p>

1     Q. And does it say, does it have remarks on 2 the bottom, next to 14?  3     A. Relating to -- yeah. May be contamination. 4 Yeah.  5     Q. And then, Doctor, looking at the Defense 6 Exhibit 8056, the same tab, I believe, if not I have 7 a copy.  8       I'd like to move it in?  9     THE COURT: Do you have copies? 10    MS. SULLIVAN: I have a copy, yes.  11    MR. PANATIER: Thanks.  12    THE COURT: Keep turning pages, Doctor. 13 Next.  14    MR. PANATIER: I don't have an objection, 15 your Honor.  16 BY MS. SULLIVAN:  17    Q. And, Doctor --  18    THE COURT: Hold on.  19    A. Yep.  20    THE COURT: It continues. There you go.  21    A. Thank you.  22    THE COURT: You're welcome.  23 BY MS. SULLIVAN:  24    Q. Can you tell our jurors, did J&J follow-up 25 and did McCrone test the Johns-Manville sample that	Page 98  1 that the above fibers," in quotes, "might be wrongly 2 identified as chrysotile." And they describe and say 3 that "two factors make this possible," and they go on 4 to describe that.  5     Q. In the second paragraph does it talk about 6 Dr. Pooley and what he reports?  7     A. Mr. Grieger, who's at McCrone, stated, "Such 8 particles had been observed by him in earlier talc 9 samples and had been shown previously to be other than 10 chrysotile.  11    "Dr. Pooley, in a phone call to Dr. Rolle, 12 also reported seeing them during the course of his 13 talc studies. He concluded from microprobe work that 14 these particles are fibrous talc."  15    Q. And that is the Johns-Manville sample.  16    And then, Doctor, I'm going to try quickly 17 before lunch to go through the last two testing 18 boards, but I want to ask you a couple questions 19 first.  20    If J&J -- when you were head of product 21 safety, if J&J Baby Powder or Shower to Shower had 22 had asbestos, would you have continued to sell it?  23    A. No.  24    Q. And if J&J -- if somebody -- did anyone at 25 the company ever say wow, we have asbestos in our
1 they reported?  2    A. Yes. I remember this now, yes.  3    Q. And can you tell our jurors what McCrone 4 found in the sample?  5    A. On the Johnson's Baby Powder, which is lot Y 6 120, and on the Italian cosmetic talc from Talco 7 Grafite, they site, "In samples 1 and 3, however, we 8 did find evidence of small fiber-like entities which 9 at first glance might be mistaken for chrysotile 10 fibrils. Each was less than one micrometer in length 11 and one-hundredth angstrom units in width, and what 12 appears to be a central hollow core.  13    "This core is however, discontinuous, unlike 14 that of chrysotile. That these fibers are not 15 chrysotile is demonstrated conclusively by their 16 electron diffraction patterns which show them to be of 17 amorphous structure."  18    Q. And did McCrone find chrysotile in the 19 Johns-Manville samples?  20    A. What they stated are these fibers, in 21 quotes, are not chrysotile.  22    Q. And do they also talk about the 23 Johns-Manville method?  24    A. Yes. They state, "From what I know of the 25 Johns-Manville method, there is a strong possibility	Page 99  1 product, let's hide it from everybody?  2     MR. PANATIER: Objection, your Honor. 3 Speculation.  4     THE COURT: Objection sustained.  5 BY MS. SULLIVAN:  6     Q. Did you ever hear anything like that; we 7 have asbestos in our product, let's hide it?  8     A. No.  9     Q. And did you ever instruct anyone let's 10 hide the fact that we have asbestos in our baby 11 powder?  12    A. No. I did not.  13    Q. Did any academic institution who tested 14 your powder say we found asbestos, but we're not 15 going to tell anybody?  16    A. I've never seen any documentation to that 17 effect.  18    Q. And have you ever seen any evidence that 19 J&J ever told any of these independent academic 20 institutions who tested your powder oh, if you find 21 asbestos, don't tell anybody?  22    A. Again, I've never seen any evidence to that 23 effect.  24    Q. And, Doctor, based on your review and 25 analysis of the testing documents, was there ever

<p style="text-align: right;">Page 102</p> <p>1 asbestos in Johnson &amp; Johnson's Baby Powder?</p> <p>2 A. None of the documents that I've reviewed</p> <p>3 have indicated the presence of asbestos in baby powder</p> <p>4 or Shower to Shower.</p> <p>5 Q. And, Doctor, when you were at the company,</p> <p>6 would you have put the safety of babies and people</p> <p>7 at risk?</p> <p>8 A. No way.</p> <p>9 Q. If we could, Doctor, go back to our</p> <p>10 testing board here. And we've got 4/4/74. That's</p> <p>11 Plaintiff 2523 and that's Tab 41.</p> <p>12 Do you have it, Doctor?</p> <p>13 A. Yes. Tab 41, yes.</p> <p>14 Q. Can you tell our jurors whether this is</p> <p>15 more of those research tests?</p> <p>16 A. Yes. This was an experiment or request to</p> <p>17 consider experiments on topics relating to possible</p> <p>18 contamination of talc.</p> <p>19 Q. And, Doctor, are these test results?</p> <p>20 A. No. They're experiments. People often did</p> <p>21 experiments, and this similarly describes the outline</p> <p>22 of experiments that people were debating.</p> <p>23 Q. Does this have anything to do with testing</p> <p>24 of final product?</p> <p>25 A. No. It's mainly a study of experiments that</p>	<p style="text-align: right;">Page 104</p> <p>1 samples. He's already acknowledged that.</p> <p>2 THE COURT: But there's no foundation that it</p> <p>3 relates to this time period and this in particular.</p> <p>4 MS. SULLIVAN: I'll move on.</p> <p>5 THE COURT: That's why I brought you here.</p> <p>6 MS. SULLIVAN: I'll move on.</p> <p>7 THE COURT: Thank you.</p> <p>8 (Sidebar ends.)</p> <p>9 BY MS. SULLIVAN:</p> <p>10 Q. Doctor --</p> <p>11 THE COURT: Objection is sustained. Let's</p> <p>12 move on.</p> <p>13 BY MS. SULLIVAN:</p> <p>14 Q. And then, Doctor, 4/24/74 is the next one.</p> <p>15 This is a McCrone document, Plaintiffs' Exhibit</p> <p>16 2049. This is at Tab 42 of your binder, Doctor.</p> <p>17 A. Yes.</p> <p>18 Q. And this relates to the Argonaut ore body?</p> <p>19 A. Yeah. The 38 core samples taken from a new</p> <p>20 ore body, which is, yes, considering and exploiting.</p> <p>21 Q. And if we go here, it talks about</p> <p>22 microscopy of ore samples from a new ore body that</p> <p>23 they're contemplating exploiting, right?</p> <p>24 A. That was the purpose of the study, to look</p> <p>25 at the ore body.</p>
<p style="text-align: right;">Page 103</p> <p>1 you could do with talc.</p> <p>2 Q. And, Doctor, you talked about the fact</p> <p>3 that in those experiments -- in those experiments,</p> <p>4 did the company spike samples?</p> <p>5 A. That was part of the project, if you spike</p> <p>6 or -- I'm sorry.</p> <p>7 MR. PANATIER: Lack of foundation, your</p> <p>8 Honor. Sorry, Dr. Hopkins.</p> <p>9 THE COURT: Sidebar.</p> <p>10 (Sidebar.)</p> <p>11 THE COURT: I don't know which board we're</p> <p>12 talking about.</p> <p>13 MS. SULLIVAN: It's --</p> <p>14 MR. PANATIER: This is all that talks about.</p> <p>15 It's experiments to try to destroy the fibrous</p> <p>16 chrysotile and tremolite as found in Vermont talc. It</p> <p>17 doesn't say anything about spiking.</p> <p>18 Again, this is just counsel injecting her own</p> <p>19 opinion.</p> <p>20 THE COURT: There's nothing on here that says</p> <p>21 spiking. That's why I was confused whether you had</p> <p>22 moved on to another document and that's why I called</p> <p>23 you here.</p> <p>24 MS. SULLIVAN: It was just a general question</p> <p>25 when they're doing these tests they were spiking the</p>	<p style="text-align: right;">Page 105</p> <p>1 Q. Again, Doctor, is this testing on finished</p> <p>2 product?</p> <p>3 A. No. As I said yesterday, you can test the</p> <p>4 acreage, the ore body, to see what's underground.</p> <p>5 Q. And if there was a finding of asbestos in</p> <p>6 an ore body, under J&amp;J's quality assurance</p> <p>7 procedure, would they have used that ore?</p> <p>8 A. Well, the ore body could cover several</p> <p>9 acres. If there were materials that you didn't want,</p> <p>10 you wouldn't mine in that area.</p> <p>11 Q. So is this evidence of asbestos in Johnson</p> <p>12 &amp; Johnson's finished talcum powder product?</p> <p>13 A. No. The report is a study of the ore body,</p> <p>14 the acreage, to see what's down there underground.</p> <p>15 Q. That they're contemplating exploiting?</p> <p>16 A. Yes.</p> <p>17 Q. And then, Doctor, I guess that's the same</p> <p>18 document. 5/9/74. This is Plaintiffs' Exhibit</p> <p>19 2050.</p> <p>20 And, Doctor, I'm just going to show you</p> <p>21 quickly, is this ore --</p> <p>22 A. What tab, please?</p> <p>23 Q. I actually don't have a tab. It's a</p> <p>24 plaintiff exhibit. I'm going to put it up. If you</p> <p>25 could just turn around. I apologize, Doctor.</p>

<p style="text-align: right;">Page 106</p> <p>1 And again, is this exploration of ore 2 body?</p> <p>3 A. Yeah. May '74. Examination of ores from 4 products in the Argonaut ore body.</p> <p>5 Q. Is this testing of finished product?</p> <p>6 A. No. It's testing of the ore body.</p> <p>7 Q. And then same document, 7/8/74.</p> <p>8 And, Doctor, I show you this document. 9 This is your Tab 44, Plaintiffs' Exhibit 2530.</p> <p>10 And does it talk about what's going on 11 here?</p> <p>12 A. Is this a tab in my book?</p> <p>13 Q. Yes. This is Tab 44.</p> <p>14 A. Yeah. It's a report from McCrone to Johnson 15 &amp; Johnson saying they have examined, analyzed 21 16 samples of talc, so...</p> <p>17 Q. Just going back to a topic we had talked 18 about before, is this evidence that McCrone is 19 reporting when they find even one fiber?</p> <p>20 A. Yes. Yeah. They report one, two, yes.</p> <p>21 Q. And can you tell our jurors whether 22 McCrone found asbestos or contamination here?</p> <p>23 A. They say they found one small chrysotile 24 fiber and one tremolite fiber, probably chrysotile in 25 samples whatever, we found one chrysotile fiber and in</p>	<p style="text-align: right;">Page 108</p> <p>1 THE COURT: Can you show plaintiff's counsel 2 first?</p> <p>3 MS. SULLIVAN: Sure. It's Defense Exhibit 4 7835.</p> <p>5 MR. PANATIER: There's no objection to that.</p> <p>6 THE COURT: Go ahead.</p> <p>7 A. It's the leaflet we're talking about. Yeah, 8 okay.</p> <p>9 Q. Do you want to --</p> <p>10 A. No, I'm familiar with it, I just want to 11 make sure --</p> <p>12 Q. Can you tell our jurors what's going on 13 here?</p> <p>14 A. Yeah. The son of the mine owner decided to 15 produce a little brochure, a sales pitch for the talc, 16 and he wrote that up. It was translated into English 17 from Italian. And he used the word -- I don't 18 remember the exact words now, but can we put that up 19 on the screen?</p> <p>20 Q. Sure.</p> <p>21 A. Yeah. He used the word a hard silicate 22 content extremely low, only traces, as it demonstrated 23 by the testing of qualified technical institute.</p> <p>24 Q. And it also talks about here in this 25 brochure, generally tremolite or chrysotile is at</p>
<p style="text-align: right;">Page 107</p> <p>1 other samples we found two chrysotile fibers.</p> <p>2 Q. Do they talk about a brake line issue in 3 the bottom here?</p> <p>4 A. Yeah. These are the type of fibers that one 5 would normally get from brake line where debris which 6 could well be circulated in the atmosphere and 7 inadvertently fall in the sample preparation in the 8 processing of these materials.</p> <p>9 Q. And, Doctor, if there was a finding of 10 asbestos in the talc, would you have used this 11 product as finished -- as something that J&amp;J sold?</p> <p>12 A. No. It would -- it would have failed to be 13 approved.</p> <p>14 Q. This is 7/8/74. Again, we talked about 15 tremolite. Does that say asbestos in 7/8/74?</p> <p>16 A. No. It just says tremolite fiber.</p> <p>17 Q. Doctor, are you familiar with this thing, 18 this 1974 Societa Talco issue; have you looked at 19 that?</p> <p>20 A. I have, yes.</p> <p>21 Q. Can you tell us what that's about?</p> <p>22 A. Can we put this up?</p> <p>23 Q. Do we have it?</p> <p>24 THE COURT: Show plaintiff's counsel.</p> <p>25 MS. SULLIVAN: Actually, here's my copy.</p>	<p style="text-align: right;">Page 109</p> <p>1 trace levels, right?</p> <p>2 A. That's what he reported. Yes.</p> <p>3 Q. And then if we go, Doctor, to page --</p> <p>4 there's the last document in your tab, which is 5 Defense Exhibit 7834, which I'd like to move into 6 evidence.</p> <p>7 THE COURT: What tab is that?</p> <p>8 MS. SULLIVAN: It's -- we don't have a tab, 9 your Honor. I'm happy to show counsel.</p> <p>10 MR. PANATIER: No objection if I can get a 11 copy of it.</p> <p>12 MS. SULLIVAN: Sure.</p> <p>13 THE COURT: I'm sorry. I apologize, what was 14 the marking?</p> <p>15 MS. SULLIVAN: Defense 7834, moving into 16 evidence.</p> <p>17 THE COURT: And there was no objection?</p> <p>18 Admitted. Go ahead.</p> <p>19 (Defense Exhibit 7834, was moved into 20 evidence.)</p> <p>21 BY MS. SULLIVAN:</p> <p>22 Q. Doctor, on page 2, if you want to turn to 23 the screen, what does it say about the translation 24 issues between the brochure and English?</p> <p>25 A. It relates to translating the brochure,</p>

<p style="text-align: right;">Page 110</p> <p>1 which is originally in Italian, into an English      2 version. And Villa, that was the name of the son, he      3 presumed the talc talk by saying that it is not always      4 possible to translate Italian into technical English.      5 He explained that in Italian, a trace of      6 something such as chrysotile actually means none at      7 all could be found. In Italian he stated a trace      8 means not at all, but it always comes out wrong in      9 English.</p> <p>10 Q. Doctor, in any event, was the brochure a      11 test result?</p> <p>12 A. No. The brochure was Mr. Villa's story of      13 Italian talc.</p> <p>14 Q. And then if we look at McCrone again,      15 7175, this is Tab 59. And, Doctor, this is      16 Plaintiff 2053.</p> <p>17 Again, does this relate to ore?</p> <p>18 MR. PANATIER: Your Honor, this was asked and      19 answered on the 25th of July.</p> <p>20 MS. SULLIVAN: Not in the context of the      21 board, though, your Honor.</p> <p>22 MR. PANATIER: It's still asked and answered.</p> <p>23 THE COURT: Asked and answered. Move on.      24 You've covered it.</p> <p>25 BY MS. SULLIVAN:</p>	<p style="text-align: right;">Page 112</p> <p>1 tremolite?      2 A. It does. Yes.      3 Q. Does it say asbestos?      4 A. No. It just says tremolite.      5 Q. And we talked about Dr. Paoletti's paper,      6 right?      7 A. We did. Yes.      8 Q. Any evidence that that relates to Johnson      9 &amp; Johnson's talcum powder?      10 A. There was no mention in Paoletti's paper of      11 the Italian talc, Johnson's talc.      12 Q. And then we have again amphiboles,      13 amphiboles, amphiboles; any mention of asbestos in      14 these test documents?      15 A. No. No.      16 Q. And then McCrone 1990. And, Doctor, this      17 is your Tab 62.      18 A. Okay.      19 Q. And Plaintiffs' Exhibit 2035 talks about      20 90-30, right?      21 A. It does, yes.      22 Q. And, Doctor, if we look at 90-30, is that      23 even a Johnson &amp; Johnson product, the last page?      24 MR. PANATIER: Objection. Calls for      25 speculation.</p>
<p style="text-align: right;">Page 111</p> <p>1 Q. And, Doctor, we talked about the HC      2 issue --</p> <p>3 THE COURT: I've already made a ruling.</p> <p>4 MS. SULLIVAN: I'm sorry. I didn't know --</p> <p>5 THE COURT: You've already covered the HC      6 issue, too.</p> <p>7 BY MS. SULLIVAN:</p> <p>8 Q. Doctor, do those documents support the      9 notion that there's asbestos in Johnson &amp; Johnson's      10 talcum powder as this board suggests?</p> <p>11 MR. PANATIER: Speculation.</p> <p>12 THE COURT: Sustained.</p> <p>13 BY MS. SULLIVAN:</p> <p>14 Q. Those documents don't relate to finished      15 product, correct, Doctor?</p> <p>16 A. Correct.</p> <p>17 Q. Okay. Finally, last page of the board      18 here, if we could just go to 11/5, this is on Tab 60      19 in your -- Doctor, given the court's ruling, it's      20 the same, it's the same issue, we've covered it?</p> <p>21 A. Okay. I'm good with that.</p> <p>22 Q. And does it relate to finished product,      23 this test?</p> <p>24 A. It says, "Series of talc ore samples."</p> <p>25 Q. And then in March '76, that says</p>	<p style="text-align: right;">Page 113</p> <p>1 THE COURT: Hold on. Don't answer just yet.</p> <p>2 Sidebar.</p> <p>3 MS. SULLIVAN: I can lay a foundation, your      4 Honor.</p> <p>5 THE COURT: Sidebar.</p> <p>6 Go ahead. Lay a foundation.</p> <p>7 BY MS. SULLIVAN:</p> <p>8 Q. Doctor, at the time you were at the      9 company, were you familiar with the codes and names      10 used for Johnson &amp; Johnson talcum powder?</p> <p>11 A. Yes. They're either 66 or 96.</p> <p>12 Q. And is beta gamma product, would that have      13 been cosmetic talc or industrial talc?</p> <p>14 A. Well, it wasn't cosmetic talc. It could      15 have been an industrial. But it was not the 66 or 96.</p> <p>16 Q. So does 90-30 relate to Johnson &amp;      17 Johnson's talcum powder?</p> <p>18 A. Not to the talcum powder used in cosmetic      19 products.</p> <p>20 Q. And then if we look at the bench sheet      21 from the same test report here on page 797, it talks      22 about anthophyllite?</p> <p>23 A. Yes.</p> <p>24 Q. Does it say anthophyllite asbestos?</p> <p>25 A. No. It just says anthophyllite.</p>

1     Q. And the jury's heard a lot about 2 Dr. Blount, and she's on this chart about three 3 times.  4       Are you aware of any, other than the 1991, 5 her 1991 paper that the jury's heard about, are you 6 aware of any other test results that you've seen or 7 that anyone's seen that showed a, quote, unquote, 8 positive test for asbestos?  9     A. From Dr. Blount or -- 10    Q. From Dr. Blount. 11    A. No. 12    Q. And, Doctor, the jury has seen her 13 testimony and you're aware that she's testified she 14 may have mixed up -- 15    MR. PANATIER: Your Honor, objection. 16    THE COURT: Sustained. The jury is to 17 disregard that question. 18    MR. PANATIER: Your Honor, can we have a 19 sidebar? 20    THE COURT: Yes. 21    MS. SULLIVAN: We're going to play -- 22    THE COURT: Sidebar. 23    (Sidebar.) 24    THE COURT: With respect, you keep trying to 25 get it in there about the issue of samples and other --	Page 114  1 that, counsel. 2       MS. SULLIVAN: I'm sorry. 3       THE COURT: There you go. 4     A. No. It just says tremolite. 5     Q. And more Dr. Blount, which hopefully the 6 jury will hear her testimony. 7       The last entry, that's the TV station 8 we've already talked about, right? 9     A. In Sacramento County, yes. 10    Q. And did that show ever air? 11    A. No. It did not. 12    MR. PANATIER: Asked and answered. 13    THE COURT: Next question. 14 BY MS. SULLIVAN: 15    Q. And were you or anyone able to obtain a 16 sample and test it? 17    MR. PANATIER: Same. Asked and answered as 18 well. 19    THE COURT: It's been covered. Let's move 20 on. 21    MS. SULLIVAN: All right. 22 BY MS. SULLIVAN: 23    Q. So, Doctor, looking at these testing 24 boards and allegations of asbestos in talcum powder, 25 did J&J ever sell to the public talcum powder with
Page 115  1     MS. SULLIVAN: It's on the board. I didn't 2 ask that question, your Honor. I said it's already 3 been put on the screen without objection, that she 4 mixed up the samples and that's her testimony. He's 5 familiar with that. 6       MR. PANATIER: Right. And this here has 7 nothing to do with that. That's the 1991 paper. And 8 again, counsel is injecting her own opinion in this 9 case. I'd ask for whether or not the deposition is 10 going to be played. We don't believe it is. 11    MS. SULLIVAN: Your Honor, they stood up and 12 told the jury let the jury see Dr. Blount's testimony. 13    THE COURT: You know what, why don't we save 14 that motion for when I hear it. 15    MR. PANATIER: Right. 16    THE COURT: We have this witness here that I 17 think we all would like to conclude today. 18    MR. PANATIER: All I'm saying is on this 19 part, there's no foundation for that question. 20    THE COURT: There is none. Move on. 21    (Sidebar ends.) 22 BY MS. SULLIVAN: 23    Q. And, Doctor, the RJ Lee Group also, does 24 it say asbestos? 25    THE COURT: You're going to have to move	Page 115  1 asbestos? 2     A. My stance on that is no. 3     Q. And would you have let that ever happen? 4     MR. PANATIER: Asked and answered. 5     MS. SULLIVAN: Nothing further. Thank you 6     THE COURT: Thank you. 7     Counsel, do you want to -- 8     MR. PANATIER: Yeah. I could start. 9     THE COURT: Go ahead. 10    MR. PANATIER: As long as everybody's okay 11 with it. 12 REDIRECT EXAMINATION BY MR. PANATIER: 13    Q. All right. I can get started. 14    I want to just start a little bit where 15 you left off. 16    You were asked about this document. 17    First of all, with regard to what was on 18 the boards, what was reported on those boards was 19 exactly what was reported in the documents that were 20 referenced by the boards, correct? 21    MS. SULLIVAN: Objection. Foundation. 22 Mischaracterizes the evidence. 23    THE COURT: Overruled. 24    You can answer. 25    A. Can I have the question again?

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1 Q. Yes.		1 Babymate is not a J&J product.
2 What was represented on the boards, and		2 THE COURT: Very good. Move on.
3 counsel took you through them all. There's one by		3 BY MR. PANATIER:
4 way of example. If it said, whatever was		4 Q. J&J doesn't make Babymate, right?
5 represented on the board is what was in the		5 A. That's correct.
6 document, correct?		6 Q. Yet Johnson & Johnson repeatedly looked at
7 A. Yeah. If it said tremolite and that's		7 and analyzed other companies' products, didn't they?
8 reported on the board as tremolite.		8 A. I don't know how many, but it's not unusual
9 Q. Right.		9 to look at other companies' products to take a look
10 You didn't find where we misrepresented		10 and see what they're doing, yeah.
11 anything about what was in those documents, did we?		11 Q. In fact, sir, you're aware, because I've
12 MS. SULLIVAN: Objection. Foundation.		12 asked you about this document before, haven't I?
13 THE COURT: Sustained.		13 A. I believe so. Yes.
14 BY MR. PANATIER:		14 Q. You're aware that Johnson & Johnson looked
15 Q. You said you went through all the		15 into Babymate, found fibrous tremolite, and
16 documents, right?		16 concluded this is likely Italian talc, the same
17 A. Yes. We have the documents. Yes.		17 stuff we use, right?
18 Q. You said you went through them all, right?		18 A. Can we read the exact phraseology?
19 A. Yes.		19 Q. Of course. Let's do that.
20 Q. Was anything that was reported in the		20 MS. SULLIVAN: Dr. Hopkins, if you'd like my
21 documents any different than what was reported on		21 copy I can --
22 the boards?		22 A. Sure.
23 A. No. The documents, if they report		23 MS. SULLIVAN: Counsel?
24 tremolite, say tremolite.		24 A. Breaking my neck.
25 Q. So let's look at one of the ones counsel		25 Thank you.
1 asked you about.		1 Q. Yep.
2 This one from January 30 of 1967 --		2 So if you look under the laboratory
3 MS. SULLIVAN: Can you tell me what exhibit		3 findings it says it's better than 97 percent pure
4 it is?		4 talc. And then it says it has less than half a
5 MR. PANATIER: Exhibit 2363.		5 percent of the fibrous tremolite, right?
6 MS. SULLIVAN: Do you have a copy or a tab?		6 A. Yes.
7 MR. PANATIER: You guys handed me the copy.		7 Q. And it says, "This about compares with
8 BY MR. PANATIER:		8 Italian Number 1 talc and is slightly less pure
9 Q. Let's see if I can -- it's not a great		9 chemically than MTAL EXTRA talc," right?
10 copy, but hopefully we can read it.		10 A. Yes.
11 Do you see here where it says baby powder		11 Q. And let's go right down here where it says
12 at the top?		12 talc source.
13 A. Yes.		13 Do you see that?
14 Q. Right?		14 A. I do, yes.
15 MS. SULLIVAN: Your Honor, I'm just going to		15 Q. And it says, "The talc is not from a
16 object. This isn't a J&J product.		16 naturally occurring domestic talc. It could be a
17 MR. PANATIER: Your Honor, they asked --		17 beneficiated floated domestic talc, as is available
18 THE COURT: You asked questions on this		18 from North Carolina or Alabama.
19 document. This is redirect.		19 "The structure of the particles, however,
20 MS. SULLIVAN: Your Honor, I didn't show the		20 and the presence of the associated carbonates and
21 document because you had ruled that nobody could. As		21 tremolite lead me to believe it is Italian talc."
22 long as everyone's clear, it's not a J&J product.		22 Is that what Johnson & Johnson Mr. Russell
23 THE COURT: No speaking objections. To the		23 concluded?
24 side.		24 A. Yes. They say it is an Italian talc. And
25 MR. PANATIER: I will make it very clear		25 as we've said, there are many mines in Italy.

1     Q. How many mines are there? 2     A. I don't know how many there are today, but 3 certainly a lot of small ones closed down, but 4 certainly they were well into double figures in the 5 '70s. 6     Q. Really? Which mines were these? 7     A. There were several in the Alps area and in 8 the Northern Italy near Alpine areas. 9     Q. What were those called? 10    A. Well, there's the Val Chisone Valley, but 11 then there's a parallel valley several miles away 12 where there's also several mines in Italy. The 13 Italian talc has been around for a long time, various 14 grades of Italian talc have been available for a long 15 time -- 16    Q. I haven't asked you whether or not there 17 were different grades. 18    MS. SULLIVAN: Objection to the interruption. 19    A. You asked me how many mines. 20    Q. Yes. 21    A. And what I said is more than double figures. 22    Q. Yeah. 23    And he said right here that it about 24 compares with Italian Number 1, and Italian Number 1 25 is what Johnson & Johnson was using, right?	Page 122  1     A. No. What he's talking about asbestos 2 toxicology is that that's, along with talcosis, is -- 3 relates to fines. 4     Q. In our baby powder, or from our baby 5 powder, right? 6     A. You need to see the context. You read what 7 is written, but the context is at that time the 8 company was looking to raise the particle size of the 9 plates, talc plates and reduce the number of fines, 10 and this guy goes on to say that's the factor that's 11 implicated. It doesn't say there's asbestos there. 12 He said it's related to asbestos toxicology. 13    Q. If there's no asbestos there -- you're a 14 toxicologist, right? 15    A. Yes. 16    Q. If there's no asbestos there, there can't 17 be asbestos toxicology; pretty obvious, right? 18    MS. SULLIVAN: Objection. Argumentative. 19    THE COURT: Sustained. Please rephrase. 20 BY MR. PANATIER: 21    Q. If there's no asbestos, you can't have any 22 worry about asbestos toxicology, correct? 23    A. On baby powder products you would not be 24 worried, but as I've said before, the company 25 manufactured 80 percent of its mining operation was
Page 123  1     A. Yes, but the first sentence said it's better 2 than 97 percent pure talc. 3     Q. Okay. 4     Let's look at, this was Exhibit 2767 which 5 you looked at with counsel. And here it says, "It's 6 important that we" -- 7     MS. SULLIVAN: I'm sorry, counsel, can I just 8 have the date? 9     MR. PANATIER: Yes. August 9, 1971. 10 BY MR. PANATIER: 11    Q. "It is important that we continue the 12 processing work on the removal of fines from our 13 baby powder since this is the faction implicated in 14 talcosis and asbestos toxicology." 15    This is the one, this is the one where you 16 were asked does the word asbestos appear. 17    Do you remember that? 18    A. Yes. 19    Q. And the word asbestos appears. We can 20 agree on that; sure? 21    A. Adjacent to the word asbestos toxicology, 22 yes. 23    Q. And the asbestos toxicology, when they're 24 talking about this is the faction implicated, is 25 fines from our baby powder, correct?	Page 125  1     industrial talcs. 2     Q. Are we talking about industrial talcs? 3     A. No, but that's -- 4     Q. Can we agree those words appear in that 5 sentence? 6     A. The words appear. 7     Q. Do the words baby powder appear? 8     A. The word baby powder appears and the word 9 asbestos toxicology. 10    Q. You knew I was going there. 11    Okay. So we can agree on that; fair? 12    A. Yes. 13    Q. The next, one of the other documents you 14 were asked about was Plaintiffs' Exhibit 2398, the 15 Italian medicated and Grantham talc document. 16    You recall that? 17    A. Yes. 18    Q. And one of the questions was asked, do you 19 know if the plaintiffs in this case used the 20 medicated powder. 21    The medicated powder used the same sources 22 as the baby powder, correct? 23    A. The talc source. 24    Q. Yes. 25    A. Yes.

1     Q. Okay. 2     A. Yes. 3     Q. And so if there was a finding of asbestos 4 in the medicated powder, it would be the same source 5 being used in the baby powder, correct? 6     A. Well, they were using the same talc, yes. 7     Q. And, sir, you're aware, if we go to the 8 second to the last page, that they did find asbestos 9 in Shower to Shower, and they say it's possibly 10 contamination, right? 11    A. Yes. You've got background contamination 12 occasionally, yes. 13    Q. But that's not what they were talking 14 about there. They were talking about an additive to 15 Shower to Shower called G-11. 16    Do you recall that? 17    A. I'm familiar with G-11. Yes. 18    Q. But G-11 hadn't been used in the product 19 for three years by that point. Isn't that true? 20    A. It had not been used since 1968. 21    Q. You were also asked about this document, 22 where I believe it's Bill Ashton. This is dated 23 August 6, '71. There he is. Bill Ashton. 24    And he says he's shipped one drum of 25 Italian rock from the Crosetto mine in the Chisone	Page 126	1     MR. PANATIER: Okay. The copy I got doesn't 2 say, but it's 1048. 3     THE COURT: Thank you very much, counsel. 4     MR. PANATIER: So, and we could just finish 5 with this document, your Honor. 6     THE COURT: Sure. I'm sorry. What's the 7 marking on this, for the record? 8     MR. PANATIER: This one is 3314. There you 9 go, sir. 10    A. Yep. 11    MR. PANATIER: Offer this in evidence, your 12 Honor. 13    MS. SULLIVAN: Your Honor, can we have a 14 sidebar? 15    THE COURT: Sure. 16    (Sidebar.) 17    MS. SULLIVAN: You might want to use this is 18 not objectionable. I think it's objectionable to put 19 on the labor issues they're having. 20    MR. PANATIER: If that becomes an issue 21 later, we can agree to redact anything that -- 22    MS. SULLIVAN: Can you tell me what -- 23    MR. PANATIER: Just section 5, processing and 24 controls. 25    THE COURT: It's not even on the same page,	Page 128
1     Valley? 2     A. Yes. 3     Q. Now, look, as someone who is trained as a 4 scientist, you agree it's important to be specific 5 and accurate in what you represent, correct? 6     A. Absolutely. Yes. 7     Q. And what you said was well, we were 8 getting our talc from the Fontana mine, right? 9     A. And that is correct. 10    Q. And this was, they were talking about 11 Crosetto, right? 12    A. Yes. 13    Q. This is Plaintiffs' Exhibit 3314 -- 14    THE COURT: Before you go to 3314, what's 15 the marking on this one that's on the screen? 16    MR. PANATIER: Sure. Sure. This one, this 17 one doesn't have an exhibit number. It's August 6, 18 1971. 19    THE COURT: For purposes of the record, we 20 need to create one. 21    MR. PANATIER: Yeah. 3695-100. 22    MS. SULLIVAN: It says Plaintiff's Exhibit 23 1048. 24    THE COURT: Thank you. 25    MS. SULLIVAN: At least on my copy.	Page 127	1     but for purposes of the document before it goes in, 2 just -- 3     MS. SULLIVAN: Let me see section 5, your 4 Honor. 5     THE COURT: Sure. 6     MS. SULLIVAN: It's 6035? 7     MR. PANATIER: Um-hum. 8     MS. SULLIVAN: No objection. 9     THE COURT: Go ahead. 10    (Sidebar ends.) 11    THE COURT: Admitted, subject to the court's 12 ruling. 13    (Plaintiff's Exhibit 6035 was moved into 14 evidence.) 15 BY MR. PANATIER: 16    Q. I see at the top this says it was July 15, 17 1966, right? 18    A. Yes. 19    Q. "Review of the Italian Talc Source Societa 20 Talco e Grafite Val Chisone," right? 21    A. Yes. 22    Q. You know that Crosetto is in Val Chisone, 23 right? 24    A. As we've seen from the previous exhibit. 25    Q. And you know Fontana is in Val Chisone?	Page 129

<p style="text-align: right;">Page 130</p> <p>1 A. Yes. It's a whole valley.</p> <p>2 Q. Do you know, in fact, that Fontana and</p> <p>3 Crosetto are different divisions of the same mine,</p> <p>4 they're two holes for the same deposit?</p> <p>5 A. I'm not familiar with the geology.</p> <p>6 Q. Turn, if you will, to page 5 of the</p> <p>7 document I've handed you, sir. Section 5.</p> <p>8 You see where it says, "The company</p> <p>9 currently recovers talc suitable for the preparation</p> <p>10 of cosmetic product from two mines, Fontana and</p> <p>11 Crosetto" --</p> <p>12 A. Yeah.</p> <p>13 Q. -- "which are developed on a single</p> <p>14 mineralized zone."</p> <p>15 Did I read that right?</p> <p>16 A. Yes. That's a geological phrase.</p> <p>17 Q. But what you said, sir, with counsel, was</p> <p>18 basically this document, because it dealt with</p> <p>19 Crosetto, didn't have anything to do with Johnson &amp;</p> <p>20 Johnson; but it does, doesn't it?</p> <p>21 A. I refute that. Johnson &amp; Johnson's product</p> <p>22 was taken from the Fontana mine and they, the one in</p> <p>23 question we looked at was from the Crosetto mine.</p> <p>24 Q. Right. And they say --</p> <p>25 A. They actually say preparation of products</p>	<p style="text-align: right;">Page 132</p> <p>1 Q. Have you found that under introduction?</p> <p>2 A. Yes.</p> <p>3 Q. Okay.</p> <p>4 And if I can, your Honor, I'd just like to</p> <p>5 show the second paragraph.</p> <p>6 THE COURT: That's fine.</p> <p>7 MR. PANATIER: Thank you, your Honor.</p> <p>8 BY MR. PANATIER:</p> <p>9 Q. Do you see, sir, where it says, "Today</p> <p>10 Fontane mine is the Italy's leading talc mine. Its</p> <p>11 output, about 40,000 tons per year, and quality</p> <p>12 level, 80 percent pure cosmetic talc, also make it</p> <p>13 one of the most important in Europe.</p> <p>14 "It consists of two distinct sections,</p> <p>15 Gianna and Crosetto, which lie on the left and the</p> <p>16 right of the Germanasca Stream, respectively."</p> <p>17 Correct?</p> <p>18 A. Yes. They're separated by the river.</p> <p>19 Q. And what you said is that Johnson &amp;</p> <p>20 Johnson got all their talc from the Fontane mine,</p> <p>21 right?</p> <p>22 A. That is correct.</p> <p>23 Q. And you said I would need to see something</p> <p>24 geological, right?</p> <p>25 A. Yes.</p>
<p style="text-align: right;">Page 131</p> <p>1 from two mines.</p> <p>2 Q. Right. And where does it say the company</p> <p>3 recovers the talc from; Fontana and Crosetto,</p> <p>4 correct?</p> <p>5 A. Yeah. Two mines. Yes.</p> <p>6 Q. Okay. And that's the talc that Johnson &amp;</p> <p>7 Johnson was using in its products, correct?</p> <p>8 A. Just the Fontana mine, correct.</p> <p>9 Q. You're aware, sir, they are divisions of</p> <p>10 the exact same hole in the ground?</p> <p>11 A. I don't believe you can read that from</p> <p>12 what's written here. It describes them from a single</p> <p>13 mineralized zone, and a mineralized zone is</p> <p>14 constructed for many miles. Without seeing the</p> <p>15 geology, we can't conclude that.</p> <p>16 Q. No problem.</p> <p>17 This is Exhibit 875. I have an article</p> <p>18 entitled, Geology of the Italian High Quality</p> <p>19 Cosmetic Talc from the Pinerolo District.</p> <p>20 You see that?</p> <p>21 A. I do, yes.</p> <p>22 Q. And I would just like to ask you a</p> <p>23 question, if you can, just turn to page 106, sir.</p> <p>24 It's at the top, 106.</p> <p>25 A. Okay. Yep.</p>	<p style="text-align: right;">Page 133</p> <p>1 Q. I've handed you an article where the first</p> <p>2 word is geology, correct?</p> <p>3 A. Yes.</p> <p>4 Q. Okay. And this says that the mine has two</p> <p>5 sections, Gianna and Crosetto, the Fontane mine,</p> <p>6 correct?</p> <p>7 A. Which if you go on to say they lie to the</p> <p>8 left and the right of the Germanasca Stream, the</p> <p>9 river. So they are separate, correct.</p> <p>10 Q. They are one mine, sir. There's a stream</p> <p>11 going down the middle, correct?</p> <p>12 A. They can't be one mine if they're separated</p> <p>13 by the stream.</p> <p>14 You know, again, we need to have an expert</p> <p>15 geologist. But the understanding from that is that</p> <p>16 they are separate and they use that description</p> <p>17 themselves, two distinct sections.</p> <p>18 Q. Sir, this geological paper says there is</p> <p>19 something called the Fontane mine, right?</p> <p>20 A. Yes.</p> <p>21 Q. And it says it has two sections, right,</p> <p>22 the mine, correct, does it?</p> <p>23 A. The Fontana mine is Italy's leading</p> <p>24 production. It consists of two distinct sections.</p> <p>25 Q. Gianna and --</p>

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<p>1 A. Crosetto. 2 Q. In one mine, correct? 3 A. It actually says in the earlier report there 4 were two mines, Fontana mine and Crosetto mine. 5 Q. You understand that a mine can have more 6 than one hole dug into it. 7 You understand that, right? 8 A. It depends on the separation of the two. A 9 mine, if you have one hole then that's it, but if the 10 other mine pit is several miles away or several 11 hundred yards away, its geology could well be totally 12 different. 13 Q. And, sir, you just asked me to show you 14 what a geologist said about it. 15 A. Yes. 16 Q. And I've shown that to you, haven't I? 17 A. Yes. 18 MR. PANATIER: Your Honor, good time for 19 lunch? 20 THE COURT: Yes. 21 Members of the jury, it's time for the lunch 22 break. Please leave your notebooks here. 23 Remember the instructions. Wear your juror 24 badges where they are visible. 25 Remember all the instructions I've provided</p>	<p>1 A F T E R N O O N S E S S I O N 2 COURT OFFICER: Jury entering. 3 (Jury enters.) 4 THE COURT: Please be seated. Make sure cell 5 phones are turned off. 6 Mr. Panatier, you may continue. 7 MR. PANATIER: Thank you, your Honor. Good 8 afternoon. 9 BY MR. PANATIER: 10 Q. Good afternoon, Dr. Hopkins. 11 A. Good afternoon. 12 Q. I was thinking, so we had this 13 conversation about Crosetto, Fontana and so forth. 14 I'm sure you recall that. 15 A. Yes. 16 Q. And you said there was a stream dividing 17 the two? 18 A. Yes. It's on the map. 19 Q. You're not saying the stream prevented 20 them from mining underneath that, right? 21 A. I'm not a miner. I'm just saying that the 22 two are physically geographically separated and 23 there's a stream between the two. 24 Q. Okay. So you have traveled here from 25 England, right?</p>
Page 135	Page 137
<p>1 to you. No discussions with regard to this case, 2 including the testimony you've just heard. 3 Enjoy your lunch. Be ready to come back 4 upstairs at 1:35. Thank you. 5 (Jury exits.) 6 (There is a discussion off the record.) 7 THE COURT: Off the record. 8 (Luncheon recess taken from 12:34 p.m. to 9 1:52 p.m.) 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>	<p>1 A. Um-hum. Yes. 2 Q. And if you want to go to France, you drive 3 under the English Channel, right? 4 A. You can do that. 5 Q. So you can go under bodies of water? 6 A. Yes. 7 Q. English Channel is a lot bigger than a 8 stream, is it not? 9 A. Yes. Yes. 10 Q. So you were asked about this document. 11 This one is the Johns-Manville document. I don't 12 know if it had a defense exhibit number on it. It's 13 August 28, 1973. 14 THE COURT: I'm sorry, what was -- 15 MR. PANATIER: August 28, 1973. 16 THE COURT: I thought Mr. Nolan had the 17 exhibit number. 18 MR. PANATIER: The copy I got did not have 19 one. 20 MR. NOLAN: It's P-10556. 21 THE COURT: Thank you. 22 BY MR. PANATIER: 23 Q. Now, Johns-Manville was an asbestos 24 company, right? 25 A. I'm sorry. Do you have the document?</p>

<p style="text-align: right;">Page 138</p> <p>1 Q. I've put it up here. I was given a copy 2 by the defense, so I'm using that copy to put it up 3 there. I don't have an extra copy. 4 A. That's fine. 5 MR. NOLAN: May I approach, your Honor? 6 THE COURT: Do you have a copy for 7 Dr. Hopkins? 8 MR. NOLAN: Yes. 9 THE COURT: Thank you, Mr. Nolan. 10 A. Thank you. 11 Q. This will happen a few times 'cause I'm 12 questioning based on documents that were just handed 13 to me. 14 A. Okay. 15 Q. So I haven't had time to photocopy them 16 all. 17 But Johns-Manville, that was an asbestos 18 company, right? 19 A. I believe that was part of their operation, 20 yes. The asbestos business. 21 Q. You understand historically they were the 22 world's biggest asbestos company? 23 A. I understand they were an asbestos company. 24 I don't know... 25 Q. And you would presume that Johns-Manville</p>	<p style="text-align: right;">Page 140</p> <p>1 Johnson did an estimate of exposure at just ten 2 parts per million. 3 Do you recall that? 4 A. Yes. 5 Q. Okay. All right. Let's go to the next 6 page. Under C. They say, "The only samples which 7 contain chrysotile believed to be part of the 8 mineralogical system at this stage of the study 9 are," and they list Italian cosmetic talc, correct? 10 A. Yeah. You read what was written. 11 Q. Okay. On the next page they have, the 12 Johnson &amp; Johnson at approximately 1,000 parts per 13 million, and then the Italian cosmetic at 3,000 14 parts per million. And that's chrysotile, correct? 15 A. Yes. It's under the heading of chrysotile. 16 Q. And, of course, Johnson &amp; Johnson, their 17 people went and met -- went and met with JM and they 18 disagreed with JM's findings, right? 19 A. Yes. 20 Q. They regularly did that; if someone 21 reported asbestos, Johnson &amp; Johnson would often go 22 meet with them and then report that they disagreed 23 with the results. 24 Is that fair? 25 MS. SULLIVAN: Objection. Argument.</p>
<p style="text-align: right;">Page 139</p> <p>1 knew asbestos when they saw it, wouldn't you? 2 A. I don't know. I wouldn't presume. I mean, 3 we're looking at 1973. 4 Q. Okay. Do you know that they had been in 5 business by then by decades and they mined 6 specifically chrysotile in Canada? 7 A. No. I'm not familiar with Johns-Manville. 8 I know them only as a company that was mining asbestos 9 and -- 10 Q. I'm sorry. You know that they were doing 11 transmission electron microscopy of commercial talc, 12 right? 13 A. Well, they apparently were in 1973. Yes. 14 Q. And you could see that they did not detect 15 it in a series of them, under section A and then 16 under B, it says, "If the chrysotile content was 17 determined to be 1,000 parts per million or less, 18 the chrysotile at this stage of the study has to be 19 considered a contaminant." Right? 20 A. Yes. 21 Q. And they say, "Johnson &amp; Johnson Baby 22 Powder," correct? 23 A. That's what is written. Yes. 24 Q. Now, in one of the documents that we've 25 looked at, and we'll look at it again, Johnson &amp;</p>	<p style="text-align: right;">Page 141</p> <p>1 THE COURT: Sustained. Please rephrase. 2 BY MR. PANATIER: 3 Q. Was it Johnson &amp; Johnson's practice to 4 meet with people who reported asbestos in their 5 talc, first of all? 6 A. If anyone found or claimed to have found 7 asbestos, then the company would take that very 8 seriously and go to try and understand how they came 9 to that conclusion. 10 Q. Someone -- 11 A. Required a meeting, yes. 12 Q. Someone else that reported chrysotile 13 asbestos in the talc was Societa Talco e Grafiti, 14 Val -- my Italian is not very good. 15 A. Val Chisone. 16 Q. Val Chisone? 17 A. Yeah. 18 Q. And this is Defense Exhibit 7835. It's up 19 there on the board, sir, right? 20 A. Yes. 21 Q. You're very familiar with this document? 22 A. Yes. 23 Q. And here they state, "The talc impurities 24 may be classified as follows: The very hard 25 silicates as chrysotiles and tremolites of"</p>

<p style="text-align: right;">Page 142</p> <p>1 amphibolitic derivation; namely, with strict 2 asbestos content." Right?</p> <p>3 A. That's what the son of the owner wrote in 4 his little pamphlet. Yes.</p> <p>5 Q. Yes.</p> <p>6 The owner of the mine wrote that?</p> <p>7 A. The son of the owner of the mine, yes.</p> <p>8 Q. And they describe these as very hard 9 silicates; true?</p> <p>10 A. That's what the son wrote in the Italian 11 version, yes.</p> <p>12 Q. And they profiled the talc coming out of 13 their mine, correct?</p> <p>14 A. Yes.</p> <p>15 Q. And they describe trace hard silicates, 16 correct?</p> <p>17 A. He describes trace when that's translated in 18 that paragraph, yes.</p> <p>19 Q. And you and Miss Sullivan showed us this 20 document, Defense 7834, which was a personal and 21 confidential document regarding a meeting where 22 Johnson &amp; Johnson then went and actually met with 23 Mr. Gianfranco Villa, the son of the owner, right?</p> <p>24 A. Yes.</p> <p>25 Q. And there, according to this memo, and I</p>	<p style="text-align: right;">Page 144</p> <p>1 A. There were other issues that related to 2 translation other than the word trace.</p> <p>3 Q. Let's see what the Italians say trace 4 means. This will be Plaintiffs' Exhibit 2544.</p> <p>5 Here you go, your Honor. Here you go, 6 sir.</p> <p>7 I've shown you this document before, 8 haven't I?</p> <p>9 MS. SULLIVAN: Your Honor, I'm going to 10 object as cumulative. Counsel has already questioned 11 this witness about this.</p> <p>12 MR. PANATIER: I haven't questioned about 13 this document at all.</p> <p>14 MS. SULLIVAN: It's in evidence. It's been 15 asked about.</p> <p>16 MR. PANATIER: It's in evidence not by --</p> <p>17 THE COURT: Excuse me. Objection overruled. 18 Proceed.</p> <p>19 MR. PANATIER: I'm sorry.</p> <p>20 BY MR. PANATIER:</p> <p>21 Q. You see this, this is a, is this a 22 telegram or a telex?</p> <p>23 A. Could be. Yeah. Could be a telegram.</p> <p>24 Q. 19, looks like it's 8/17. Does that tell 25 us the date?</p>
<p style="text-align: right;">Page 143</p> <p>1 think it looks like Bill Ashton, right? He wrote 2 this, right?</p> <p>3 A. He did.</p> <p>4 Q. Okay. You showed us this.</p> <p>5 "Villa explained that in Italian, a trace 6 of something such as chrysotile actually means none 7 at all could be found." Right?</p> <p>8 A. That's what is written, yes.</p> <p>9 Q. "Decisions reached, having obtained 10 Mr. Villa's agreement that his booklet needed a 11 rewrite."</p> <p>12 This isn't the first time we've seen 13 Johnson &amp; Johnson discussing rewriting something in 14 Italian?</p> <p>15 MS. SULLIVAN: Objection. Argument.</p> <p>16 THE COURT: Overruled. You can answer.</p> <p>17 A. In the context of translation, remember the 18 book is written in Italian, and it was concluded that 19 the translation wasn't good enough.</p> <p>20 Q. We just showed the jury an English one 21 that said chrysotile, sir.</p> <p>22 A. You did. And that was a bad translation. 23 That was the whole point.</p> <p>24 Q. The whole point was a bad translation with 25 regard to the word trace?</p>	<p style="text-align: right;">Page 145</p> <p>1 A. No. It wouldn't be 17. I don't know. May 2 not be a date.</p> <p>3 Q. Either way, it discusses a visit with 4 Johnson &amp; Johnson, right?</p> <p>5 A. Yes.</p> <p>6 Q. It says, "Regarding our visit to 7 Portsmouth requested by Johnson yesterday and today, 8 we have had the visit of Mr. William H. Ashton, 9 Director of the Research Division of Johnson &amp; 10 Johnson, U.S.A.</p> <p>11 "We have discussed the contents of 12 tremolite in our talc. In our booklet we speak of 13 traces. By this word we mean a few parts per 14 million, whilst the Americans by this word mean a 15 percentage till two percent."</p> <p>16 So, sir, what Mr. Ashton wrote down was 17 that when the Italians say trace they mean zero, but 18 that's not what the Italians say, is it? They say 19 it means a few parts per million, correct?</p> <p>20 A. I don't know who this author was of this 21 telex or telegram, but somebody called Rudier LDNO, 22 but someone has written this relating to Val Chisone. 23 So this person has made another statement as to what 24 trace means.</p> <p>25 Q. And this person, you see this? Talco SVC?</p>

<p style="text-align: right;">Page 146</p> <p>1 A. Yes.</p> <p>2 Q. Societa Val Chisone?</p> <p>3 A. Yes. But I don't know the ability for</p> <p>4 someone called Rudier LDNO to translate what he means.</p> <p>5 It's yet another definition of what they mean by</p> <p>6 trace.</p> <p>7 Q. Dr. Hopkins --</p> <p>8 A. The document speaks, says what it says.</p> <p>9 Q. This is the only definition we have from</p> <p>10 the Italians as to what they mean by trace because</p> <p>11 Mr. Ashton is the person who wrote the previous memo</p> <p>12 who said trace means zero, right?</p> <p>13 A. That's what he wrote based on the meeting he</p> <p>14 had with the people in Italy.</p> <p>15 Q. Finishing the Ashton memo, it says,</p> <p>16 "Mr. Villa will stop the distribution on his booklet</p> <p>17 in England and to any English-speaking countries</p> <p>18 after their meeting," right?</p> <p>19 A. On that translated version, yes.</p> <p>20 Q. "Mr. Ferry will not release" -- now,</p> <p>21 Mr. Ferry was the importer of Italian talc in the</p> <p>22 U.S.; true?</p> <p>23 A. Yes.</p> <p>24 Q. -- "will not release any copies in the</p> <p>25 U.S.A., and Villa now understands why he delayed</p>	<p style="text-align: right;">Page 148</p> <p>1 THE COURT: Objection sustained. The jury</p> <p>2 will disregard.</p> <p>3 BY MR. PANATIER:</p> <p>4 Q. As long as it didn't include the word</p> <p>5 chrysotile; correct, sir?</p> <p>6 A. I can't speculate on what a rewrite or</p> <p>7 translation would have included.</p> <p>8 Q. So you discussed some of these boards, and</p> <p>9 thankfully it was only copies that were marked</p> <p>10 out so we could still read them, but --</p> <p>11 MS. SULLIVAN: Objection, your Honor, to the</p> <p>12 word marked.</p> <p>13 THE COURT: There was no reason for that</p> <p>14 comment.</p> <p>15 MR. PANATIER: Sure.</p> <p>16 BY MR. PANATIER:</p> <p>17 Q. So the boards, you already said what we</p> <p>18 reported on the boards was accurate for what the</p> <p>19 documents state, right?</p> <p>20 A. Yes. Where you've written the word</p> <p>21 tremolite, the word tremolite, et cetera.</p> <p>22 Q. And the reason I bring up marking them out</p> <p>23 is because we know, and this is Plaintiffs' Exhibit</p> <p>24 3173 in evidence, we talked about the Interrogatory</p> <p>25 answers that Miss Musco signed, correct?</p>
<p style="text-align: right;">Page 147</p> <p>1 until now.</p> <p>2 "Three, it is up to Mr. Ferry and me to</p> <p>3 carry through with how we will revise, rewrite and</p> <p>4 rearrange the SVC publication for maximum benefit to</p> <p>5 all concerned." Right?</p> <p>6 A. Yes.</p> <p>7 Q. Mr. Ashton isn't saying me and Mr. Ferry,</p> <p>8 because we know Italian, are going to kindly</p> <p>9 translate this. They're going to rewrite it.</p> <p>10 That's what it says, right?</p> <p>11 MS. SULLIVAN: Objection. Lawyer argument.</p> <p>12 THE COURT: Objection overruled.</p> <p>13 You can answer.</p> <p>14 A. The document states what it states.</p> <p>15 Q. And it states what I stated, right? They</p> <p>16 aren't translating it, they're rewriting it for</p> <p>17 maximum benefit to all concerned, right?</p> <p>18 A. That was the whole point of the document, to</p> <p>19 tell the story of Italian talc.</p> <p>20 Q. As long as it didn't include the word</p> <p>21 chrysotile, right?</p> <p>22 A. But we know from innumerable examinations</p> <p>23 that there was no chrysotile in the Italian talc.</p> <p>24 MR. PANATIER: Objection. Non-responsive,</p> <p>25 your Honor.</p>	<p style="text-align: right;">Page 149</p> <p>1 A. Yes.</p> <p>2 MS. SULLIVAN: Your Honor, objection.</p> <p>3 Cumulative. This has been covered with Dr. Hopkins at</p> <p>4 length.</p> <p>5 THE COURT: This is redirect.</p> <p>6 MS. SULLIVAN: It was already covered.</p> <p>7 THE COURT: Objection overruled.</p> <p>8 You can answer. You can ask the question on</p> <p>9 the document.</p> <p>10 BY MR. PANATIER:</p> <p>11 Q. And we know that Miss Musco answered these</p> <p>12 under oath and with assistance of Johnson &amp; Johnson</p> <p>13 counsel, correct?</p> <p>14 A. I believe that's correct.</p> <p>15 Q. We also know that as of 2000, Johnson &amp;</p> <p>16 Johnson had not turned over any of those studies</p> <p>17 reflecting tremolite, the Battelle studies, to</p> <p>18 anybody in litigation, correct?</p> <p>19 A. I'm not aware of the dates of when they were</p> <p>20 made available. I really do not know.</p> <p>21 Q. You know they weren't made available by</p> <p>22 5/23/2000, correct?</p> <p>23 A. No. You'd need to explain to me why that</p> <p>24 would be the case.</p> <p>25 Q. Well, you're the company, so I'm asking</p>

<p style="text-align: right;">Page 150</p> <p>1 you when did Johnson &amp; Johnson give these documents      2 over in litigation?</p> <p>3 A. Oh, I see. I don't know.</p> <p>4 Q. And we know that with assistance of      5 counsel, this person for Johnson &amp; Johnson said      6 under oath that there was no tremolite or any other      7 contaminants, tremolite asbestos or other      8 contaminants in Johnson &amp; Johnson's Baby Powder,      9 correct?</p> <p>10 A. That's what she wrote.</p> <p>11 Q. With the --</p> <p>12 A. I can speculate, but I'm not going to as to      13 what she meant.</p> <p>14 Q. You're not saying that that's in any way      15 unambiguous, are you, or ambiguous? It's pretty      16 unambiguous, right?</p> <p>17 A. What is written is unambiguous, but      18 Miss Musco was not experienced in geology or      19 mineralogy.</p> <p>20 Q. So when Johnson &amp; Johnson chose someone to      21 answer these questions under oath, they chose      22 someone who had no experience, right?</p> <p>23 A. Well, it's not a case of no experience.</p> <p>24 Miss Musco's qualifications, she was, maybe still is,      25 a registered nurse, and her background in the company</p>	<p style="text-align: right;">Page 152</p> <p>1 asbestos.</p> <p>2 Q. Well, then that would have been      3 repetitive, because it already said never contained      4 asbestos in any form, right?</p> <p>5 A. That is what is written. It's not clarified      6 she -- what was meant was tremolite asbestos. There's      7 no tremolite asbestos.</p> <p>8 Q. You don't know what she meant. You're not      9 a mind reader.</p> <p>10 A. I am not a mind reader, but --</p> <p>11 MS. SULLIVAN: Objection, your Honor.</p> <p>12 THE COURT: Don't argue with the witness.</p> <p>13 BY MR. PANATIER:</p> <p>14 Q. Sir, you have no idea what she meant other      15 than what she wrote, correct?</p> <p>16 MS. SULLIVAN: Objection. Asked and      17 answered.</p> <p>18 THE COURT: Overruled. Please answer.</p> <p>19 A. I don't know what she meant, but I know what      20 the reality is and the reality is that she should have      21 used the word tremolite asbestos.</p> <p>22 Q. That would have just been redundant,      23 correct?</p> <p>24 A. Grammatically, yes, but it would have also      25 enabled a bit more clarification.</p>
<p style="text-align: right;">Page 151</p> <p>1 was the interface with consumers who had questions.      2 So she wasn't exactly stupid. But we look and hear      3 semantics, differences between tremolite, tremolite      4 asbestos.</p> <p>5 Q. Well --</p> <p>6 A. That was not made clear.</p> <p>7 Q. -- there's no semantics between saying      8 it's there and it's not there. Those are two      9 completely diametrically opposed opposite things,      10 correct?</p> <p>11 A. Correct. And what she wrote was not the      12 full story.</p> <p>13 Q. It was not the full story.</p> <p>14 In fact, it was an untrue story, correct?</p> <p>15 A. No. She just missed a word out.</p> <p>16 Q. Okay. So Miss Musco and the lawyers that      17 were helping her, they all just missed a word. Is      18 that fair?</p> <p>19 A. A word was omitted. Yes.</p> <p>20 Q. And the word should have been, what's the      21 word? You tell me the word they wanted omitted. I      22 don't want to figure it out. You said there was one      23 word they omitted, so what word should be there?</p> <p>24 A. Tremolite asbestos. After the word      25 tremolite, it should have defined it as tremolite</p>	<p style="text-align: right;">Page 153</p> <p>1 Q. Well, the problem is this was what was      2 represented in a lawsuit, correct?</p> <p>3 A. I believe so.</p> <p>4 Q. And we know the statements to be utterly      5 false that there was no tremolite, right?</p> <p>6 MS. SULLIVAN: Objection. Argument.</p> <p>7 THE COURT: Overruled.</p> <p>8 You can answer.</p> <p>9 A. It would be incorrect to say there was no      10 tremolite. There is tremolite, but not tremolite      11 asbestos.</p> <p>12 Q. In fact, one of the things that you guys      13 discussed was that it was no secret that there was      14 tremolite, actinolite, anthophyllite, the mineral,      15 right? We'll get to asbestos, but the mineral in      16 the baby powder, right?</p> <p>17 A. Yes.</p> <p>18 Q. So it's there in the baby powder.</p> <p>19 When you look at a bottle of Johnson &amp;      20 Johnson, what does it say the ingredients are?</p> <p>21 A. Ingredient is talc plus fragrance.</p> <p>22 Q. Two ingredients, talc and fragrance,      23 right?</p> <p>24 A. Yes.</p> <p>25 Q. It doesn't say may contain tremolite, does</p>

1 it? 2 A. No. 3 Q. It doesn't say may contain actinolite or 4 anthophyllite, does it? 5 A. No. 6 Q. But it does, correct? 7 A. It may in some cases contain a few rods of 8 tremolite, which is part of the way it's mined out of 9 the ground. 10 Q. And you drew for us what a rod was, 11 correct? 12 A. I drew a rod. Yes. 13 Q. And it looks something like this, right? 14 A. That's not exactly how I drew it, but a rod 15 -- a geologist or mineralogist will define a rod -- 16 Q. Go ahead. You could finish. 17 A. -- a rod as having the shape like my pen. 18 It'll have a rod shape. Looks like that. 19 Yes. Something like that. It'll look like 20 that. 21 Q. Does Johnson & Johnson agree that its 22 customers and consumers should be able to make 23 informed decisions about what they purchase to put 24 on their bodies and the bodies of their children? 25 A. Yes.	Page 154  1 chrysotile, fibrous structures, in Vermont talc, yes, 2 tremolite. 3 Q. Yeah. 4 Now, if there's just plain old tremolite, 5 right, non-fibrous tremolite, plain old tremolite, 6 it's Johnson & Johnson's position there's nothing 7 wrong with that, that's fine, you're going to expect 8 some of that, right? 9 A. Yes. 10 Q. You wouldn't set out to try and destroy 11 it, would you, because there's no problem? 12 A. As I said before, 80 percent of the 13 company's business was in industrial talcs, and if you 14 could make any purer industrial talc you could use 15 other sources, other mines. 16 Q. There's nothing that says this is 17 industrial talc, is there? 18 A. No. It's an experiment. 19 Q. Let's look at the letterhead. Does that 20 say industrial products company or does that say 21 Baby Products Company? 22 A. The company never had an industrial product 23 company. It was just a Baby Products Company at 24 Johnson & Johnson. 25 Q. For a long time the Baby Products Company
Page 155  1 Q. Yet nothing has ever been on the label 2 about these minerals, tremolite, actinolite, 3 anthophyllite or chrysotile, correct? 4 MS. SULLIVAN: Asked and answered. 5 Objection. 6 THE COURT: Overruled. 7 You can answer. 8 A. That's correct. The product contains talc 9 and fragrance. 10 Q. This is from your redirect examination, or 11 cross, Plaintiffs' Exhibit 2523. 12 You were shown this document, sir, about 13 Colorado School of Mines, and they were asked to 14 determine whether or not they could destroy the 15 fibrous structure of chrysotile and tremolite in the 16 Vermont talc, correct? 17 A. That was the proposed experiment, yes. 18 Q. And they said let's run it on low key up 19 to the point where we can file patent protection, 20 right? 21 A. Yes. 22 Q. They actually reference Vermont talc and 23 chrysotile and fibrous tremolite, correct? 24 A. That proposal, that experimental proposal 25 does talk about can we destroy tremolite -- sorry,	Page 155  1 was just a division of the overall company. Isn't 2 that true? 3 A. Yes. 4 Q. In fact, until 1978 the Baby Products 5 Company is the one, the division that made the baby 6 powder and sold the baby powder, correct? 7 A. The baby powder division was Baby Products 8 Company, yes. 9 Q. That was a division of Johnson & Johnson, 10 not a separate company, correct? 11 A. Yes. 12 Q. After 1978, the Baby Products Company 13 became a subsidiary of Johnson & Johnson; true? 14 A. Yes. 15 Q. And that's what later, through different 16 name changes, became Johnson & Johnson Consumer 17 Inc., or JCCI, correct? 18 A. Yes. 19 Q. This has nothing to do with industrial 20 talc, does it? 21 A. The people doing experiments were the same 22 people involved with working with Windsor Minerals, to 23 look at their talcs. 24 Q. Okay. Here's the question: This document 25 about destroying chrysotile and tremolite in the

<p>1 talc, the Baby Products Company -- from the Baby 2 Products Company has nothing to do with industrial 3 talc, does it?</p> <p>4 A. It doesn't say it has anything to do with 5 industrial talc. But as I've said, it would certainly 6 relate to industrial talc if you were successful in 7 that experiment.</p> <p>8 Q. 'Cause maybe you could do it in industrial 9 talc, too?</p> <p>10 A. Or you could buy an industrial mine that 11 wasn't good enough until you destroyed it, separate 12 mine.</p> <p>13 Q. But the truth is, Johnson &amp; Johnson never 14 made any efforts to get asbestos out of their 15 industrial talc, did they?</p> <p>16 A. That was -- that was typical of the kind of 17 studies you would do to say if you purchased, and 18 we've seen this morning where the company is looking 19 at something like 50 different mines. If you purchase 20 an industrial mine, could you remove tremolite if it 21 were there.</p> <p>22 Q. We haven't even seen a document that says 23 if you purchase an industrial mine can you remove 24 the asbestos, have we?</p> <p>25 A. The company was always looking for</p>	<p>Page 158</p> <p>1 THE COURT: Thank you. Continue. 2 By MR. PANATIER:</p> <p>3 Q. You were also shown this document, 8 July, 4 1974. This is Plaintiffs' 2530. And you were asked 5 about some of the findings here. This was to Robert 6 Role.</p> <p>7 Now, Robert Rolle was in the Baby Products 8 Company, correct?</p> <p>9 A. Yes, he was. Yes.</p> <p>10 Can I see the document?</p> <p>11 Q. I'm sorry, this was just handed to me 12 during cross-examination so I haven't been able to 13 make copies of it.</p> <p>14 THE COURT: Hold on.</p> <p>15 MS. SULLIVAN: We'll find it, your Honor.</p> <p>16 THE COURT: Okay. Thank you.</p> <p>17 BY MR. PANATIER:</p> <p>18 Q. So --</p> <p>19 THE COURT: Wait one moment. The witness 20 wants to see the document.</p> <p>21 MR. NOLAN: P-2530.</p> <p>22 THE COURT: Thank you.</p> <p>23 MS. SULLIVAN: May I, your Honor?</p> <p>24 THE COURT: Sure. Thank you, Miss Sullivan.</p> <p>25 A. Thank you.</p>
<p>Page 159</p> <p>1 industrial talcs. I don't know whether we've seen one 2 today, but it was an option that the company had to 3 look for additional talc.</p> <p>4 Q. I'd ask that you just answer the question. 5 Have you seen any document that says boy, 6 we need to try to destroy the asbestos in the 7 industrial talc?</p> <p>8 MS. SULLIVAN: Objection.</p> <p>9 A. I have never --</p> <p>10 THE COURT: Hold on. Please don't answer the 11 question just yet.</p> <p>12 MS. SULLIVAN: Objection to form.</p> <p>13 THE COURT: Can you repeat the question?</p> <p>14 MR. PANATIER: Sure.</p> <p>15 BY MR. PANATIER:</p> <p>16 Q. The question I'm asking, is there any 17 document that says we're trying to destroy asbestos 18 in the industrial talc?</p> <p>19 A. I have not seen those documents. What I 20 have said is that 80 percent of the company's business 21 was industrial talc.</p> <p>22 MR. PANATIER: And that's non-responsive, 23 your Honor. I object.</p> <p>24 A. I have not -- as I said, I have not seen 25 such a document.</p>	<p>Page 161</p> <p>1 Q. Now, you've already told us that Johnson &amp; 2 Johnson never once rejected a lot of asbestos -- a 3 lot of talc for asbestos content, correct?</p> <p>4 A. Yes.</p> <p>5 Q. So in this finding, they're looking at a 6 number of samples, correct?</p> <p>7 A. Yes.</p> <p>8 Q. And you know, sir, that the monitoring 9 frequency that they have there is the frequency that 10 was set up for the cosmetic talc, correct?</p> <p>11 A. The monitoring frequency of cosmetic talc 12 was -- was this TEM? These are like four days 13 between.</p> <p>14 Q. This is electron microscopy, correct?</p> <p>15 A. I'm trying to find the word electron 16 microscopy.</p> <p>17 THE COURT: Give Dr. Hopkins a moment to read 18 the document.</p> <p>19 A. Can you show me the word -- oh yeah, I found 20 it. Okay.</p> <p>21 The gaps between them were 10/22 to 10/26, 22 so that's four days. That does not reflect the 23 sampling for TEM.</p> <p>24 Q. Sir, the sampling for industrial talc was 25 never ever as often as for the cosmetic talc,</p>

<p>1 correct?</p> <p>2 A. The sampling for industrial talc but</p> <p>3 production was monthly. Transmission electron</p> <p>4 microscopy, yes.</p> <p>5 Q. This is certainly a lot more often than</p> <p>6 monthly, is it not?</p> <p>7 A. Yes, but --</p> <p>8 Q. Sorry.</p> <p>9 A. Carry on.</p> <p>10 Q. Okay. This was a period of time from</p> <p>11 October through March, October '73 through March of</p> <p>12 '74, where it looks like they took weekly or a</p> <p>13 little bit closer in some instances, right?</p> <p>14 A. Yes. They are fairly frequent. Yes.</p> <p>15 Q. It's to Robert Role in the Baby Products</p> <p>16 Company, as you just said, correct?</p> <p>17 A. Yes.</p> <p>18 Q. And they find one, two -- we're not going</p> <p>19 to count this one up here. They said these were</p> <p>20 some other company's products. We're going to count</p> <p>21 this, one, two, three, four, five instances of</p> <p>22 asbestos or probable asbestos, correct?</p> <p>23 A. Probable chrysotile. That's what's written.</p> <p>24 Yes.</p> <p>25 Q. Now, these were all sold, correct?</p>	<p>Page 162</p> <p>1 A. You read what was written.</p> <p>2 THE COURT: Sustained.</p> <p>3 BY MR. PANATIER:</p> <p>4 Q. These are production samples, right?</p> <p>5 A. Of whatever, yes.</p> <p>6 Q. Written to the person in the Baby Products</p> <p>7 Company; true?</p> <p>8 A. Bob Role was actually in the research center</p> <p>9 at that time.</p> <p>10 Q. You just told us he was in the Baby</p> <p>11 Products Company.</p> <p>12 A. He was. But the Baby Product Company had an</p> <p>13 independent research center with expertise in talc.</p> <p>14 Q. Hold on. You said he was --</p> <p>15 MS. SULLIVAN: Your Honor, I just object to</p> <p>16 the comment "hold on."</p> <p>17 THE COURT: Overruled. Let's move on. Go</p> <p>18 ahead.</p> <p>19 BY MR. PANATIER:</p> <p>20 Q. You said he was in the Baby Products</p> <p>21 Company. Then I showed you that these were</p> <p>22 production samples and now you say well, I don't</p> <p>23 know where he was at that time; fair?</p> <p>24 Did you just do that?</p> <p>25 A. I did not say that. What I said was he's</p>
<p>Page 163</p> <p>1 A. No. There's no evidence that these were</p> <p>2 ever related to baby powder. These could equally well</p> <p>3 be ore samplings.</p> <p>4 Q. Look what it says on the front. "We've</p> <p>5 analyzed 21 samples of talc to determine the content</p> <p>6 of asbestiform materials." Right?</p> <p>7 A. Yes.</p> <p>8 Q. Okay. You've already told us, one, to the</p> <p>9 extent that asbestos was present in its talc, it</p> <p>10 could not be removed by beneficiation, correct?</p> <p>11 A. That is the general conclusion, yes.</p> <p>12 Q. Right.</p> <p>13 Asbestos was found in these samples,</p> <p>14 correct?</p> <p>15 A. Yes. Whatever these samples were.</p> <p>16 Q. And Johnson &amp; Johnson never once rejected</p> <p>17 a lot for asbestos?</p> <p>18 A. For baby products, yes.</p> <p>19 Q. And Moshe sometimes helps me out a lot.</p> <p>20 Here's a real clear statement here.</p> <p>21 These are production samples, correct?</p> <p>22 A. Yes. But it doesn't say they're baby</p> <p>23 product production samples.</p> <p>24 MR. PANATIER: Objection. Non-responsive,</p> <p>25 your Honor.</p>	<p>Page 165</p> <p>1 based, according to the address there, at Johnson &amp;</p> <p>2 Johnson Research Center, 501 George Street, which is</p> <p>3 different from the Baby Products Company down the</p> <p>4 road.</p> <p>5 Q. Sir, he was always in the research center</p> <p>6 even when he was in the Baby Products Company,</p> <p>7 correct?</p> <p>8 A. He was -- no. The Johnson &amp; Johnson</p> <p>9 Research Center down the road on George Street was a</p> <p>10 different address from the Baby Products Company's</p> <p>11 research.</p> <p>12 Q. You were shown this document, D-7621,</p> <p>13 regarding three samples from 1990.</p> <p>14 Do you recall that?</p> <p>15 A. I do. Yes.</p> <p>16 Q. First of all, all three of these come from</p> <p>17 Johnson &amp; Johnson's mines, or what were Johnson &amp;</p> <p>18 Johnson's mines until a year before that, correct?</p> <p>19 A. They describe this being from the Cyprus</p> <p>20 Windsor and Cyprus Industrial Minerals. Cyprus owned</p> <p>21 a lot of mines in Vermont. When they purchased from</p> <p>22 J&amp;J, they had already owned mines in the Vermont</p> <p>23 state.</p> <p>24 Q. You know that grade 36 was an industrial</p> <p>25 grade sold out of the previously owned Johnson &amp;</p>

<p style="text-align: right;">Page 166</p> <p>1 Johnson mines, correct?</p> <p>2 A. Grade 36 is certainly an industrial grade.</p> <p>3 Q. That's a roofing talc grade, correct?</p> <p>4 A. Yes, it is.</p> <p>5 Q. Okay. Float feed is baby powder?</p> <p>6 A. Generally. That's the designation,</p> <p>7 although --</p> <p>8 Q. Hold on one second.</p> <p>9 A. Yes.</p> <p>10 MS. SULLIVAN: Let him answer the question.</p> <p>11 THE COURT: Hold on. Stop. The witness did not finish his response.</p> <p>13 BY MR. PANATIER:</p> <p>14 Q. However?</p> <p>15 A. I don't know what I was going to say now.</p> <p>16 The difference there is what I said earlier is that baby powder talc is graded 66 or 96. And those designations don't have that 66 or 96.</p> <p>19 Q. The only talc that went to a float feed was the baby powder, sir, correct?</p> <p>21 A. Commercially, that was correct. Whether they were doing experiments with, again, a lot of experiments going on. You could accuse me of speculating, I don't know what they were doing with float feed in experiments.</p>	<p style="text-align: right;">Page 168</p> <p>1 Do you recall that?</p> <p>2 A. I do. Yes.</p> <p>3 Q. Let's chat about that briefly.</p> <p>4 So the first thing is the citizen's petition itself, and this is so we can get our timing straight.</p> <p>7 MR. NOLAN: Your Honor, may I approach to give Dr. Hopkins his binders back?</p> <p>9 THE COURT: Sure.</p> <p>10 A. Thank you. Make life a little easier.</p> <p>11 THE COURT: Let Dr. Hopkins get to that exhibit.</p> <p>13 BY MR. PANATIER:</p> <p>14 Q. This is Defense Exhibit 7214.</p> <p>15 A. Okay.</p> <p>16 Q. Let me know once you've got it.</p> <p>17 A. I'm there.</p> <p>18 Q. Got it. Okay.</p> <p>19 So you know that the FDA received this petition on November 8, 1983, correct?</p> <p>21 A. Yes. They did.</p> <p>22 Q. The response, we could look up here, is July, looks like it went through a few offices, but July 1986. Is that fair?</p> <p>25 A. Yes.</p>
<p style="text-align: right;">Page 167</p> <p>1 Q. Repeatedly, repeatedly you have said, well, I don't want to speculate, I can't speculate. Here it would be utter speculation to say they were doing an experiment.</p> <p>5 This is not an experiment. This was periodic sampling sent for testing of three different talcs, correct?</p> <p>8 A. Yes.</p> <p>9 Q. Okay. And one of them, 90-28, is baby powder, correct?</p> <p>11 A. That's what's described as float feed.</p> <p>12 Q. Okay. So if we go to that one which is right here, client ID 90-28, you've seen that?</p> <p>14 A. Float feed, yes.</p> <p>15 Q. And we know they found anthophyllite asbestos, correct?</p> <p>17 You can look at it.</p> <p>18 A. They found anthophyllite period.</p> <p>19 Q. Let's see what they were looking for.</p> <p>20 See this was for asbestiform analysis?</p> <p>21 A. That was the point of the study. Yeah. You wouldn't do it otherwise. You're looking for asbestos if you can find it.</p> <p>24 Q. Sir, you brought up the citizen's petition.</p>	<p style="text-align: right;">Page 169</p> <p>1 Q. And you told us that this citizen who had asked for a warning statement on talc, that that request was rejected, right?</p> <p>4 A. That is what the FDA stated. Yes.</p> <p>5 Q. If you would turn, please, sir, to the page marked 50 at the bottom. It's the one that is stamped with the defense exhibit number on it.</p> <p>8 Let me know when you've found that.</p> <p>9 A. Found it.</p> <p>10 Q. All right. That is Linda Taylor's assessment that she does, correct?</p> <p>12 And if you want to turn, it goes for several dozen pages. It's signed on page 75 of 102.</p> <p>14 A. Yes.</p> <p>15 Q. That's Miss Taylor's assessment, right?</p> <p>16 A. Dr. Taylor, yeah.</p> <p>17 Q. I'm sorry. Dr. Taylor.</p> <p>18 A. Yeah.</p> <p>19 Q. Dr. Taylor.</p> <p>20 Now, it is Dr. Taylor's assessment about the risk that they rely upon to make their decision, isn't it?</p> <p>23 A. It's part of the story. They also have extensive data on monitoring of other products on the market.</p>

1     Q. So let's, if we can, Moshe, let's pull 2 January 4, '84. Thank you.  3         Now, Dr. Hopkins, you have two 4 other -- four other binders up there. This next 5 document is not in the one in front of you. That's 6 the defense binder. Ours will be, it'll be either 7 in three or four. I can come help you with it.  8     A. Okay.  9     Q. Okay.  10      And, your Honor, it would be in your binder 11 at January 4, 1984. Binder 2. Those binders may be 12 lost to posterity.  13      THE COURT: No, no. They are here. 14      MR. PANATIER: It is Binder 2. Let me grab 15 that for you.  16      It's Binder 3. It's your Binder 2, Moshe. 17      Here it is. There you go, sir. 18      It's in your Binder 3, your Honor. 19      THE COURT: Binder 3. 20      MR. PANATIER: Can I help you grab the rest 21 out of there? 22      THE COURT: Sure. 23      MR. PANATIER: Okay. 24      THE COURT: Thank you. 25      (There is a discussion off the record.)	Page 170	Page 172  1     Douiller of Stony Brook, New York, requesting a 2 warning statement against asbestos contamination in 3 baby powder. 4         "John called to request a copy of an 5 article referenced in the petition. The article was 6 entitled Asbestiform Impurities in Commercial Talcum 7 Powders." 8         Did I read that right? 9     A. You did. 10      Q. Okay. Here there's a handwritten note. 11      Let me know if I translate his handwriting wrong. 12         "Please comment on publishing of the 13 analytical method." 14         You think I got that right? 15     A. I think so. Yes. 16      Q. Now, the analytical method would be the 17 CTFA method, correct? 18     A. I don't know. 19     Q. That's fair. 20         You know that the actual response does 21 discuss at some length CTFA J4-1? 22     A. I need to see the response. It was a long 23 time ago, but there were several analytical methods. 24     Q. If you want to see a discussion of it, 25 it's on page 71 of 102. If you need to see it.	Page 171	Page 173  1     BY MR. PANATIER: 2     Q. Do you see that this is a report of a call 3 from the Johnson & Johnson Baby Products Company, 4 January 4, 1984, sir? 5     A. I do. Yes. 6     Q. And it's a memo by Robert G. Kohler and 7 it's to the talc file, correct? 8     A. It is. Yes. 9     MR. PANATIER: We offer this in evidence. 10      MS. SULLIVAN: No objection. 11      MR. PANATIER: Plaintiff's 3431. 12      THE COURT: Admitted. 13      (Plaintiff's Exhibit 3431 was moved into 14 evidence.) 15      BY MR. PANATIER: 16     Q. On January 4, 1984, the FDA calls Johnson 17 & Johnson, right? 18     A. Yes. 19     Q. And it's John Wenninger, correct? 20     A. Yes. 21     Q. It says, "At 9:10 a.m. I received a 22 telephone call from John Wenninger, Deputy Director 23 Cosmetics Technology of FDA. 24         "Mr. Wenninger informed me that FDA had 25 received a citizen's petition from a Philippe	Page 173  1     A. Okay. Let's press on. 2     Q. So the FDA gives Johnson & Johnson a 3 heads-up, correct? 4     A. They're asking do you have a copy of an 5 article. 6     Q. They also told them a citizen's petition 7 has been filed, correct? 8     A. Yes. 9     Q. So let's go back to the citizen's 10 petition. 11      Do you have that, sir? 12     A. Um-hum. 13     Q. And if we can, let's go to the page at the 14 bottom marked 39 of 102. 15      MS. SULLIVAN: I'm sorry, counsel, what page? 16      MR. PANATIER: This is 39 of 102. 17      BY MR. PANATIER: 18     Q. Do you see, sir that that's a discussion 19 of the quantitative risk of mesothelioma? 20      You see that? 21     A. Let me read it. 22     Q. Sure. 23     A. Yes. 24     Q. That's 5/21/85, right? 25     A. Yes.
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<p style="text-align: right;">Page 174</p> <p>1 Q. And I'm just going to call that the Brown 2 assessment. Okay.</p> <p>3 Now, they were looking at insulation 4 worker studies for this assessment, right? It says 5 it right there in the subject if you need a 6 reference.</p> <p>7 A. Okay. It does. Yes.</p> <p>8 Q. Because one of the problems was they 9 didn't have any data, any actual testing data of 10 asbestos fiber release in baby powder, did they?</p> <p>11 A. Who's "they"?</p> <p>12 Q. The FDA.</p> <p>13 A. No. I mean, the FDA, by 1984, had spent a 14 great deal of time and taxpayers' money evaluating 15 lots of competitive products.</p> <p>16 Q. Listen to my question again.</p> <p>17 My question was, they didn't have any 18 information on assessing the actual asbestos fiber 19 release from products during use?</p> <p>20 MS. SULLIVAN: Objection. Lacks foundation.</p> <p>21 THE COURT: Objection overruled.</p> <p>22 You could answer.</p> <p>23 A. I'm not sure I understand the question.</p> <p>24 They had information on the absence of asbestos of 25 products on the United States market.</p>	<p style="text-align: right;">Page 176</p> <p>1 A. Yes.</p> <p>2 Q. And she says that "Infants exposed to 3 asbestos from talc could be exposed to an additional 4 amount above background on the order of .04 to .08 5 fibers per cc for approximately two years." Right?</p> <p>6 A. Yes. That was a hypothetical calculation.</p> <p>7 Q. Yes.</p> <p>8 A. The whole thing is hypothetical. Yes.</p> <p>9 Q. Right.</p> <p>10 And that goes to the point. There were no 11 actual measurements of asbestos in the air during 12 the use of the talc products; no one had done that 13 work, correct?</p> <p>14 MS. SULLIVAN: Objection. Lacks foundation.</p> <p>15 THE COURT: Overruled.</p> <p>16 You can answer.</p> <p>17 A. I'm not aware that anyone's ever measured 18 asbestos in the air of people using talc.</p> <p>19 Q. Are you familiar with the Gordon paper in 20 2014?</p> <p>21 A. You need to show me.</p> <p>22 Q. I'm just asking if you're familiar with 23 it. That's fine.</p> <p>24 So look at that range for baby powder for 25 their hypothetical; .04 to .08 fibers per cc, right?</p>
<p style="text-align: right;">Page 175</p> <p>1 Q. They didn't have any information on when a 2 product is used, when a baby powder is used, an 3 actual series of measurements taken of asbestos in 4 the air, did they?</p> <p>5 A. Well, no. They haven't found any asbestos 6 in the product, so you wouldn't have found it in the 7 air.</p> <p>8 Q. They were relying on other studies of 9 other workers, including the insulation asbestos 10 workers, right?</p> <p>11 A. If you are going to measure atmospheric 12 levels of asbestos, you have to look at what happens 13 when people are mining it or milling it or digging it 14 out of the ground and using it.</p> <p>15 Q. All I'm asking you is what they looked at. 16 They looked at insulation studies, right?</p> <p>17 A. They looked at insulation workers in this 18 case, yes.</p> <p>19 Q. Let's take a look at, if you go to page 75 20 of 102.</p> <p>21 Have you found that?</p> <p>22 A. Yes.</p> <p>23 Q. There's Linda Taylor's signature, right?</p> <p>24 A. Um-hum.</p> <p>25 Q. Dr. Taylor?</p>	<p style="text-align: right;">Page 177</p> <p>1 A. Yes.</p> <p>2 Q. When Johnson &amp; Johnson did their own 3 hypothetical, they had .16 to .18, correct?</p> <p>4 A. Yes.</p> <p>5 Q. .16 is four times higher --</p> <p>6 A. No. It's not correct. .16 relate to 7 fibers, not fibers per cc.</p> <p>8 Q. We'll get to that.</p> <p>9 A. Good.</p> <p>10 Q. Would you agree mathematically that .16 is 11 four times higher than .04?</p> <p>12 A. If it related to fibers, just fibers, the 13 answer is yes.</p> <p>14 Q. Okay.</p> <p>15 A. But because in this case one relates to 16 fibers per cc and the other relates to fibers over a 17 ten or five-minute time frame period.</p> <p>18 Q. I understand your testimony about that.</p> <p>19 .18 would be more than twice as much as 20 .08, correct?</p> <p>21 A. Again, you're comparing apples with pears.</p> <p>22 Q. I'm asking you about numbers, sir.</p> <p>23 A. Numbers, yes.</p> <p>24 Q. Okay.</p> <p>25 A. But not comparing apples with pears. Two</p>

<p style="text-align: right;">Page 178</p> <p>1 apples are not greater than one pear.      2 Q. I promise we're going to get our fruit      3 straight.      4 A. Good.      5 Q. Okay?      6 She says, "Although the cumulative amount      7 of asbestos would appear to be of no consequence,      8 the estimated exposure level is 100 to 200 times      9 greater than background." Right?      10 A. That's what she's written.      11 Q. Just based on this hypothetical, with no      12 actual data of fiber release, she says that the      13 estimated exposure level is 100 to 200 times above      14 background, right?      15 A. That's what she's stated.      16 Q. Let's take this document a little bit      17 further.      18 If you will look, please, sir, at page 71      19 of 102. In that first paragraph there. When you      20 find it, let me know.      21 You see the first paragraph starting      22 "consumer talc"?</p> <p>23 A. Yes.      24 Q. Okay. Actually, let me interrupt. Let me      25 ask you this question. You said this this morning.</p>	<p style="text-align: right;">Page 180</p> <p>1 anthophyllite by XRD were also examined by optical      2 microscopy, OM, to determine crystal morphology.      3 "In all cases, the amphibole found tremolite      4 and anthophyllite were present in the massive      5 non-fibrous form. The level of detectability is      6 approximately .1 for tremolite and two percent for      7 anthophyllite."      8 By the way, I'm going to stop there and I'll      9 finish up in a moment, but...      10 MS. SULLIVAN: Could I ask counsel just to      11 follow the court's instruction?      12 THE COURT: Overruled.      13 BY MR. PANATIER:      14 Q. I will read the whole paragraph, but my      15 question here is if something is then present at      16 below .1 for that method, tremolite, or two percent      17 anthophyllite, it's not going to be seen, correct?      18 A. That's the whole point of using transmission      19 electron microscopy. You take it to the next level.      20 Q. Sir, can you just answer my question?      21 If you're using the method as they      22 described and something was there at less than .1      23 percent for tremolite or two percent for      24 anthophyllite, they would not see it, correct?      25 A. Using X-ray diffraction, you'd certainly see</p>
<p style="text-align: right;">Page 179</p> <p>1 "Extensive analysis and testing of talcum powder was      2 done in response to the citizen's petition." Right?      3 A. Yes. Not just in response, but prior to it.      4 Q. You said specifically this morning "in      5 response to," correct?      6 A. I may have done. But it was certainly done      7 prior to.      8 Q. Well, let's --      9 MS. SULLIVAN: I'm sorry, counsel. Could we      10 read the whole paragraph in the interest of      11 completeness from the samples of cosmetic talc down to      12 the bottom?      13 MR. PANATIER: Sure.      14 Oh, no. I'm not going to read all that.      15 MS. SULLIVAN: Your Honor, I request, in the      16 interest of completeness, we read the testing      17 statement.      18 MR. PANATIER: Your Honor, I mean --      19 THE COURT: Hold on. I'm reviewing it to      20 make a determination. Thank you.      21 For completeness, read the entire paragraph.      22 MR. PANATIER: "Samples of cosmetic talc      23 products were analyzed in 1979 by the Division of      24 Cosmetics Technology using X-ray diffraction, XRD.      25 Samples found to be contaminated with tremolite or</p>	<p style="text-align: right;">Page 181</p> <p>1 an amphibole less than .3 percent.      2 MR. PANATIER: Your Honor, I object to      3 non-responsive.      4 A. I'm sorry. Ask the question. Maybe I      5 didn't understand it.      6 THE COURT: One more time.      7 BY MR. PANATIER:      8 Q. The question is, using the method they're      9 talking about here, XRD and OM -- you see they also      10 say they used OM?      11 A. Yes.      12 Q. -- optical microscopy, if the substance      13 was there for tremolite in less than .1 percent,      14 they wouldn't see it, correct?      15 A. Not with that test method, no.      16 Q. If anthophyllite was there in less than      17 two percent, they wouldn't see it, correct?      18 A. Not with that test method.      19 Q. None of the samples was found to contain      20 serpentine at any detectability limit of one to two      21 percent, same question for serpentine which includes      22 chrysotile, correct?      23 A. Correct. Not at that level.      24 Q. They wouldn't see it if it was less than      25 one to two percent by XRD, correct?</p>

<p style="text-align: right;">Page 182</p> <p>1 A. Not with XRD alone.</p> <p>2 Q. "These samples were submitted for SEM 3 analysis and if fibers were found, the samples were 4 to be examined by energy dispersive X-ray analysis, 5 EDXA, to determine the nature of any fiber-like 6 particle detected. The results of the latter, SEM 7 and EDXA analysis, are not known to this reviewer. 8 No analysis of cosmetic talc have been performed by 9 FDA since '79."</p> <p>10 I'll stop there again.</p> <p>11 Sir, the FDA did no testing, no extensive 12 testing of talcum powder in response to the 13 citizen's petition, did they?</p> <p>14 A. No. They tested up till 1979.</p> <p>15 Q. They didn't do any in response to the 16 citizen's petition which was filed at the end of 17 1983?</p> <p>18 A. I'm not aware that they did.</p> <p>19 Q. Okay.</p> <p>20 A. But beyond that, I can't say more. I'm not 21 aware they did or didn't.</p> <p>22 Q. What you said this morning that they did 23 extensive testing in response to the citizen's 24 petition was not true?</p> <p>25 A. No, I think you are misunderstanding. The</p>	<p style="text-align: right;">Page 184</p> <p>1 A. Yes.</p> <p>2 Q. This is another assessment or discussion 3 of Linda Taylor's assessment, right?</p> <p>4 A. It is. Yes.</p> <p>5 Q. By Gary Flamm. And that's June 6, 1985, 6 right?</p> <p>7 MS. SULLIVAN: It's actually by --</p> <p>8 A. It's by Robert Brown at FDA. And he is 9 writing to Gary Flamm.</p> <p>10 Q. Yes. Yes.</p> <p>11 And you discussed this bit up here about 12 the risk that they calculated, right?</p> <p>13 A. Yes. They calculated a risk. Yes.</p> <p>14 Q. We'll get there.</p> <p>15 Let's go down here. Let's look at this 16 footnote right here.</p> <p>17 Do you see where he's got different 18 references flagged; one, Linda Taylor. Then you've 19 got 1, 10, 11 here?</p> <p>20 A. Yes.</p> <p>21 Q. Let's go and look at reference 11. That 22 is on page 37 of 102. Go ahead and find page 37.</p> <p>23 Have you found that?</p> <p>24 A. Yes, I have.</p> <p>25 Q. Do you see that footnote 11 is a reference</p>
<p style="text-align: right;">Page 183</p> <p>1 response to the citizen's petition was to review the 2 data they had and they had already got that, and so 3 that was their response. It was part of their 4 response to look at the data they had and come to a 5 conclusion on it.</p> <p>6 Q. Maybe at a break we'll look at your 7 testimony. Okay.</p> <p>8 Let me read the next paragraph. "As noted 9 previously, there are non-fibrous forms of minerals 10 with essentially the same chemical composition as 11 the asbestos varieties. In some cases the 12 non-fibrous form has the same name as its fibrous 13 counterpart; eg., tremolite.</p> <p>14 "According to the U.S. Department of the 15 Interior, non-fibrous, non-asbestiform tremolite is 16 the common form of this mineral, while fibrous 17 tremolite asbestiform is a very rare form of this 18 mineral."</p> <p>19 Bottom line, sir, is FDA, as far as you 20 know, as far as what they said, no testing after 21 '79, right?</p> <p>22 A. That is what is written. Yes.</p> <p>23 Q. Now, let's turn to page 28, okay, 28 of 24 102.</p> <p>25 Are you there?</p>	<p style="text-align: right;">Page 185</p> <p>1 to denial of petition for labeling of warning of the 2 hazardous effects produced by asbestos in cosmetic 3 talc from Philippe Douiller.</p> <p>4 Do you see that?</p> <p>5 A. Yes, I do.</p> <p>6 Q. July 11, 1984, that's right here.</p> <p>7 7/11/84, John Wenninger -- according to that, John 8 Wenninger had already denied the petition?</p> <p>9 MS. SULLIVAN: Objection. Lacks foundation.</p> <p>10 THE COURT: Overruled.</p> <p>11 You can answer.</p> <p>12 BY MR. PANATIER:</p> <p>13 Q. Let's read it. Denial is opposite of 14 granted, right?</p> <p>15 A. It's in quotes. What is written is 16 denial --</p> <p>17 Q. Okay. "Denial of petition for labeling of 18 warning of the hazardous effects produced by 19 asbestos in cosmetics talc from Philippe Douiller," 20 right?</p> <p>21 A. Yes.</p> <p>22 Q. Okay.</p> <p>23 A. It's a memo. Then it goes on to say an FDA 24 memo, so it's not the petition. It says FDA memo.</p> <p>25 Q. Let me tell you what I'm concerned about.</p>

<p style="text-align: right;">Page 186</p> <p>1 This right here. Denial of petition, right? You 2 see that?</p> <p>3 A. That's the heading of the topic that they 4 are talking about.</p> <p>5 Q. That is six months after Mr. Wenninger 6 calls Johnson &amp; Johnson and gives them a heads-up, 7 right?</p> <p>8 A. Mr. Wenninger calls J&amp;J, gives them a 9 heads-up and says there's a reprint I'd like you to 10 send to me, please.</p> <p>11 Q. Right.</p> <p>12 And then a few months later he's drafted a 13 memo about denying the petition, right?</p> <p>14 A. He's drafted a memo about denying the 15 petition which is different from the actual petition 16 itself.</p> <p>17 Q. That's before, four months before Ms. 18 Taylor does her assessment, right?</p> <p>19 A. Yep. It doesn't say he's come to that 20 conclusion.</p> <p>21 Q. Is it four months before, sir?</p> <p>22 A. It is four months, yes.</p> <p>23 Q. Is it ten months before Brown's 24 assessment?</p> <p>25 A. Yes.</p>	<p style="text-align: right;">Page 188</p> <p>1 that memo.</p> <p>2 Q. We know one thing, it was a denial?</p> <p>3 A. No. That's the topic, in quotes. The topic 4 is about denial.</p> <p>5 Q. Okay. Sir -- oh, one other thing.</p> <p>6 In the Linda Taylor assessment, or 7 Dr. Taylor, my apologies, in the Dr. Taylor 8 assessment, you told us that she had calculated 9 something like a one in 100 million risk for 10 mesothelioma from talc, right?</p> <p>11 MS. SULLIVAN: Objection. Lacks foundation.</p> <p>12 THE COURT: Overruled.</p> <p>13 A. They did --</p> <p>14 Q. Didn't you tell us that?</p> <p>15 A. The text states one to the minus eight, 16 which is one in a hundred million.</p> <p>17 Q. Okay. I'm putting you on the spot, but 18 are you in a position to agree with me there's about 19 325 million people living in the United States?</p> <p>20 A. Yeah. About. 325, 330. Yeah.</p> <p>21 Q. You know that we've got four people in 22 this case with mesothelioma?</p> <p>23 A. Yes.</p> <p>24 Q. Are you here to tell us that somehow we 25 found the only four people with mesothelioma after</p>
<p style="text-align: right;">Page 187</p> <p>1 Q. Is it eleven months before Flamm receives 2 it?</p> <p>3 A. Yes.</p> <p>4 Q. And is it a full two years before they 5 ultimately reject it?</p> <p>6 A. Yes. Based on all, everyone's memo and 7 their reports combined together.</p> <p>8 Q. Have you ever seen that memo where they 9 had already denied the petition six months after 10 they told J&amp;J about it?</p> <p>11 MS. SULLIVAN: Objection. Lacks foundation.</p> <p>12 It says memo.</p> <p>13 THE COURT: Please rephrase.</p> <p>14 BY MR. PANATIER:</p> <p>15 Q. Have you seen that footnote 11 entitled 16 denial of petition for labeling of warning of the 17 hazardous effects of powdered effects produced by 18 asbestos in cosmetic talc, from Philippe Douiller?</p> <p>19 Have you seen it?</p> <p>20 A. The FDA memo?</p> <p>21 Q. Yes.</p> <p>22 A. Written by Mr. Wenninger?</p> <p>23 Q. Yes.</p> <p>24 A. I have not seen that memo. I don't know 25 what the contents were, or what his opinion was out of</p>	<p style="text-align: right;">Page 189</p> <p>1 using Johnson's Baby Powder in this country?</p> <p>2 MS. SULLIVAN: Objection. Lawyer argument.</p> <p>3 THE COURT: Objection overruled.</p> <p>4 You can answer.</p> <p>5 A. As I recollect, what Dr. Taylor said is less 6 than one in a hundred million.</p> <p>7 Q. Even less, right?</p> <p>8 A. Yes.</p> <p>9 Q. Even less?</p> <p>10 A. One in a thousand million.</p> <p>11 Q. And four of them have a lawsuit in this 12 courtroom, right?</p> <p>13 A. Yes.</p> <p>14 Q. And based on the population in the U.S. 15 you would expect this many, 3.25 total people with 16 mesothelioma from this, right?</p> <p>17 A. Again, you're getting into the area of 18 speculation, because what Dr. Taylor said was less 19 than one in a hundred million. I can't speculate --</p> <p>20 Q. Yeah.</p> <p>21 A. -- on a hypothetical calculation that was 22 done in 1984.</p> <p>23 Q. You know there are four people in this 24 case with undisputed mesothelioma. You know that?</p> <p>25 A. I agree.</p>

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<p>1 Q. And, in fact, Johnson &amp; Johnson, you have 2 told us what the FDA evaluated in 1984/85/86, 3 right?</p> <p>4 A. Yes.</p> <p>5 Q. And as you told us that, you know Johnson 6 &amp; Johnson knows that the risk is far higher than 7 that based on the documents Johnson &amp; Johnson has in 8 its company, correct?</p> <p>9 MS. SULLIVAN: Objection. That's just lawyer 10 argument.</p> <p>11 THE COURT: Objection overruled.</p> <p>12 A. I don't agree. The documents that are in 13 Johnson &amp; Johnson's data indicate no asbestos in the 14 product sold.</p> <p>15 Q. Dr. Hopkins, so this is the FDA. We'll 16 talk about Johnson &amp; Johnson. I'm going to put this 17 right here.</p> <p>18 Johnson &amp; Johnson has documentation of 19 over 100 confirmed mesotheliomas from people who 20 used Johnson's Baby Powder in the company files, 21 doesn't it?</p> <p>22 MS. SULLIVAN: Objection. That's lawyer 23 lawsuits.</p> <p>24 THE COURT: Counsel, stop with the speaking 25 objections.</p>	<p>1 The jury is to disregard that argument with 2 the court.</p> <p>3 MS. SULLIVAN: These are lawsuits.</p> <p>4 THE COURT: Excuse me, counsel. Stop it.</p> <p>5 (Sidebar.)</p> <p>6 THE COURT: Save the discussion for here. Do 7 not argue with me at all.</p> <p>8 MS. SULLIVAN: Judge --</p> <p>9 THE COURT: Do not argue with me in front of 10 this jury for everyone to hear.</p> <p>11 MS. SULLIVAN: My apologies.</p> <p>12 THE COURT: Well, your apologies, but you 13 continue violating orders throughout this trial.</p> <p>14 MS. SULLIVAN: But this is so improper, your 15 Honor. This is a --</p> <p>16 MR. PANATIER: She's trying --</p> <p>17 THE COURT: Hold on. Stop it. Stop it. 18 Stop it.</p> <p>19 MS. SULLIVAN: These are lawsuits.</p> <p>20 THE COURT: Stop it. The jury -- take me off 21 of that for a moment. Stop speaking.</p> <p>22 (Sidebar ends.)</p> <p>23 THE COURT: Jury, I'd like you to take a 24 ten-minute break in the jury room.</p> <p>25 Thank you. We'll come get you when we're</p>
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<p>1 MS. SULLIVAN: Objection.</p> <p>2 THE COURT: Objection overruled. The jury's 3 to ignore that comment.</p> <p>4 You can answer the question.</p> <p>5 A. The answer to the question is I do not know 6 what's in the company's legal department today.</p> <p>7 Q. I'm not asking about the legal department. 8 The only way I could know about them is if you gave 9 them to me.</p> <p>10 You understand that?</p> <p>11 A. Yes.</p> <p>12 Q. And, sir, you know that Johnson &amp; Johnson 13 has done its own evaluations of over 100 cases of 14 mesothelioma for people who use Johnson's Baby 15 Powder and Shower to Shower to confirm, one, that 16 those people have mesothelioma, and two, that the 17 causation of the product and those mesotheliomas was 18 rated as possible, right?</p> <p>19 MS. SULLIVAN: Objection. Lacks foundation.</p> <p>20 THE COURT: Objection overruled. I have -- 21 counsel, don't speak over me.</p> <p>22 MS. SULLIVAN: Can I have a sidebar, 'cause 23 this is really misleading and I'd like a sidebar.</p> <p>24 THE COURT: Stop with the speaking 25 objections.</p>	<p>1 done. Thanks.</p> <p>2 (Jury exits.)</p> <p>3 THE COURT: Please excuse us, Dr. Hopkins.</p> <p>4 Thank you.</p> <p>5 You can return to sidebar.</p> <p>6 (Sidebar.)</p> <p>7 MS. SULLIVAN: I object --</p> <p>8 THE COURT: Hold on one moment. Take me off 9 of -- take me off of sidebar. Just take me off of 10 sidebar for a moment.</p> <p>11 (Sidebar ends.)</p> <p>12 THE COURT: Anyone in the back, you don't 13 need to remain standing. You could take a break or 14 please be seated. Thank you.</p> <p>15 (Sidebar.)</p> <p>16 THE COURT: Now, Miss Sullivan, your concern.</p> <p>17 MS. SULLIVAN: I object. There's a 18 regulatory requirement when we get a claim, when J&amp;J 19 gets a claim for a lawsuit that they have to report it 20 as part of the AE, and there's a specific regulation 21 when they make a regulation and they have to report it 22 as possible.</p> <p>23 And he's talking about lawsuits. To say that 24 there are actual people who got mesothelioma from baby 25 powder and confirmed that to the FDA is enormously</p>

1 misleading and prejudicial, and he knew exactly what he 2 was doing. These are lawsuits and claims. 3 MR. PANATIER: If I can respond? 4 MS. SULLIVAN: And allegations. 5 THE COURT: Wait. Have you completed? 6 MS. SULLIVAN: Yes. 7 THE COURT: Thank you. 8 I want to now hear this uninterrupted. 9 Proceed. 10 MR. PANATIER: Yes, your Honor. 11 Adverse event reports are something different 12 than what we have here. These are event reports that 13 Johnson & Johnson internally does their own assessment 14 on any claim they're aware of where someone has 15 mesothelioma and has alleged that they used baby 16 powder. They do it with three or four doctors per 17 event, so per person, and they go out and collect the 18 information. 19 So if they, as counsel says, if they get 20 sued, they evaluate the case, the diagnosis, and then 21 they, by way of example, here's one just for by way of 22 example. Linda Stanton is the person, and developed 23 mesothelioma. They have pages and pages where they 24 actually go through the medical history, they confirm 25 the mesothelioma, and then they assess it as to whether	Page 194 1 about was the FDA's analysis of risk. This is 2 triggered by a regulatory requirement. It's been 3 excluded in just about every litigation. This is AE 4 case reports based on lawsuits and there's specific 5 regulatory language that requires you to report it as 6 possible. 7 MR. PANATIER: May I respond briefly? 8 THE COURT: Yes. 9 MS. SULLIVAN: I mean, these aren't based on 10 claims, they're based on lawsuits. 11 THE COURT: Thank you. 12 MR. PANATIER: This isn't what is required to 13 be reported. They turned something else over to the 14 FDA. This is their own internal assessment. This is 15 not an AER report. There are AER reports that they 16 have and they have recently turned over some of those, 17 but we're not seeking to offer those in. 18 There is an FDA form that J&J fills out 19 whenever they get one, and whether or not they've 20 actually done that for these is disputed, but I don't 21 think that's part of this case. That's different than 22 this. 23 THE COURT: Thank you. 24 MR. PANATIER: This is their own assessment. 25 MS. SULLIVAN: I'm sorry.
Page 195 1 or not the company is responsible or the product. And 2 this one says the report, sorry, was assessed as 3 serious, medically significant, and company causality 4 was assessed as possible. 5 Our entire point here is if there's no 6 asbestos it could never be assessed as possible. 7 That's the first thing. 8 And the second thing is all of these people, 9 it's also documented all of these people used Johnson's 10 Baby Powder or another J&J talc product, and it's 11 obviously relevant to this line of questioning because 12 counsel elicited from this witness what they wanted to 13 show the jury was the risk factor for this, while 14 Johnson & Johnson understands that, shoot, if it's one 15 per hundred million, they know that's not true, because 16 they have at least 100, I believe it's 119 cases. And 17 that's all I'm going to ask about. 18 MS. SULLIVAN: Your Honor, I -- 19 THE COURT: Hold on a second. There 20 are four -- is there any other comment by plaintiff's 21 counsel? 22 MR. PANATIER: No. 23 THE COURT: Thank you. 24 Now you can respond. 25 MS. SULLIVAN: Your Honor, what I talked	Page 195 Page 197 1 THE COURT: Was there anything else you 2 wanted to say? 3 MS. SULLIVAN: Only, your Honor, these are 4 case reports triggered by regulation. It's reversible 5 error. They are excluded in just about every 6 litigation based on lawsuits and claims. 7 THE COURT: Okay. Thank you. 8 This is not -- there's nothing on here that 9 indicates that it is a regulatory reporting requirement 10 as opposed to, for example, an insurance company claim 11 adjustor would do an assessment for various purposes, 12 setting reserves, figuring out potential liability, et 13 cetera. This is an internal assessment for the same 14 purpose. 15 In fact, indeed it starts on December -- this 16 is for event report Number 30000365879 with regard to 17 an individual Linda Stanton. December 20, 2016, claims 18 analyst was forwarded via secure e-mail documents from 19 J&J law department. Documents were received by J&J law 20 department which is the J&J date of awareness, 28-page 21 document is complete and it continues on, where it 22 essentially would be the same thing being done 23 internally as a claims adjustor would do. 24 There is nothing here evidencing reporting to 25 the FDA or any other governmental agency. I'm going to

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1 permit it.	1 CERTIFICATION
2 MS. SULLIVAN: Other lawsuits, your Honor --	2
3 THE COURT: I've already heard your comments.	3 I, ANDREA F. NOCKS, C.S.R., License Number
4 Thank you.	4 30XI00157300, a Certified Court Reporter in and for the
5 MR. PANATIER: While we're on the record,	5 State of New Jersey, do hereby certify the foregoing to
6 your Honor, we'll just offer the packet as -- hold on,	6 be prepared in full compliance with the current
7 I have the exhibit, it's Exhibit 3149, your Honor.	7 Transcript Format for Judicial Proceedings and is a
8 THE COURT: Wait. Come back here.	8 true and accurate non-compressed transcript to the best
9 MR. PANATIER: Yes.	9 of my knowledge and ability.
10 THE COURT: So what exactly -- Exhibit 3149,	10
11 you now want to give these jurors these event	11
12 reporting?	12
13 MR. PANATIER: Yes. Yes. I believe --	<i>Andrea Nocks CCR CRP</i>
14 THE COURT: How is that admissible? First of	13 ANDREA F. NOCKS AUGUST 14, 2019
15 all, they deal with other named individuals, and how --	14 CERTIFIED COURT REPORTER DATE
16 I understand the relevance in questioning based upon	15 MIDDLESEX COUNTY COURTHOUSE
17 the prior testimony as elicited from defense counsel	16
18 relative to the response to the FDA petition and	17
19 setting, you know, what was it, ten to the negative	18
20 eight power risk assessment.	19
21 But how is this, how is this not a	20
22 prejudicial issue now?	21
23 MR. PANATIER: Okay. So I think what we can	22
24 do is if on the break all I want to do is verify the	23
25 number of them and I can do that with Dr. Hopkins	24
	25
1 perhaps, with counsel present. I can say Dr. Hopkins,	
2 can you look through these and just verify the numbers	
3 so we don't have him sitting up there counting them.	
4 Because I have my count, but he may want to count them.	
5 MS. SULLIVAN: Just tell him how many and	
6 he'll accept your representation, over my objection.	
7 MR. PANATIER: I'll do that.	
8 THE COURT: Count them and then that can be	
9 stipulated.	
10 MR. MAIMON: I think there is other	
11 relevance, your Honor, although it might not be with	
12 this witness. But, for instance, Miss McNeill is one	
13 of the reports. They have denied the possibility that	
14 her mesothelioma is caused by their product. And here	
15 is an internal admission, and it's an admission by a	
16 party opponent with regard to this party that they've	
17 assessed the causality as possible.	
18 MR. PLACITELLA: Moreover, moreover, in the	
19 report itself it says that there is no other explained	
20 cause.	
21 (Continuation of the day's proceedings	
22 in Volume 2.)	
23	
24	
25	

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## [workplace - zone]

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# Exhibit 83

FROM THE DESK OF  
**W. NASHED**

Dr. Goudie

I thought tremolite was mistakenly identified in view of similarity to Na sesquicarbonate!

W. Nashed

These are trace quantities present confirmed both by McCrone & Bill Ashton. Levels are extremely low but occasionally can be detected optically. This is not new. Joe

Revised report.  
Just received.

108T

109T

# Exhibit 84

7. Langer  
Letter

TF 0039



MOUNT SINAI SCHOOL OF MEDICINE  
of The City University of New York  
FIFTH AVENUE AND 100TH STREET • NEW YORK, N.Y. 10029



Department of Community Medicine

November 10, 1971

Dr. Gavin Hildick-Smith  
Director of Clinical Research  
Johnson and Johnson  
Research Division  
New Brunswick, New Jersey

Dear Dr. Hildick-Smith:

I have in front of me a letter dated August 9, 1971 addressed to Dr. Selikoff indicating your wish to receive some information on the Tenovus sample that you so kindly lent to us. I have been putting off answering this letter not because I am a feisty devil so much as the fact that I lost the letter on my desk! I called your office last week. You were out and I feel that I would do as well to report to you in writing.

In respect to the Tenovus samples that were sent to us, we made the following observations. We did find some grains that resembled talc with the usual electron diffraction pattern consistent for a sheet silicate structure. Again, we have no definitive means of identifying the particle on the basis of its electron diffraction pattern in that many sheet silicates yield a similar array of spots. We assume that the particles were talc or, rather, were consistent with talc. We also got a few surprises in that we observed some chrysotile asbestos to be present in the tissue as well. We have been kicking this observation around the Laboratory for a while and we might consider a publication somewhere -- just a short note indicating that we have observed these materials present in the tissues.

We have also analyzed one of your talc samples in some detail. In addition to the normal platy talc present, we have observed many "fibrous talcs" as well. This fibrous talc material closely resembles normal platy talc but appears with a greater length aspect. Its terminations are prism terminations and

Dr. Gavin Hildick-Smith

November 10, 1971

Page Two

and the general characteristics under the electron microscope do indeed resemble normal talc. Electron diffraction on ~~these grains again yields~~ these grains again yields a talc pattern which is a very well-defined hexagonal array of spots. We also observed trace amounts of chrysotile asbestos only when the talc was sonified and markedly dispersed. The amounts of chrysotile are relatively small, occurring in amounts, we estimate, at less than .01%. The J & J baby talc is of quite high quality and as a matter of fact, in relation to the number of samples we have examined thus far, it is the "purest".

We just thought that we would pass this information along to you as our colleagues in scientific research and you may use it as you wish. Again, many thanks for giving us the samples and allowing us to look them over. Incidentally, I am very interested in obtaining some of your material called sodium sesquicitrate which has been bandied about as possessing a structure that is not unlike chrysotile. Do you think you could have one of your research boys send me some of this?

Again, many thanks, and if you need any further information, please don't hesitate to call on me.

Sincerely,



Arthur M. Langer  
Associate Professor  
Mineralogy

AML:1kh

# Exhibit 85

August 24, 1972

Talc/Asbestos  
SHOWER TO SHOWER Talc

Dr. R. A. Fuller

Dr. Weissler, Director, Division of Cosmetics, FDA, called us this afternoon to report that they had submitted a sample of SHOWER TO SHOWER previously examined by Dr. Lewin to the Sperry Rand scanning electron microscope facility this afternoon.

The report from Sperry Rand was that asbestos fibers could be detected in the sample. Dr. Weissler said that he has in front of him photographs of 6 fields at 12,000X magnification showing fibers with length to width ratios of 10-to-1 to 50-to-1, one of them appearing on top of a talc plate. He estimated that their diameter is less than .05 micron (about 1/10 of an inch in his photograph).

I asked Dr. Weissler if the Sperry Rand facility handles minerals. He said yes, they do a lot of work with chrysotile. I asked him, "Have they reported to you the normal background contamination in their samples. As you recall, this was the problem in Mt. Sinai's laboratories." He said no; however, he feels that the man who did the work is conservative and would not have reported chrysotile unless he was sure. I asked him if he has assured himself that the fibers were not tremolite which could be present in trace amounts. He said the fibers are characteristic of chrysotile and not tremolite.

I told Dr. Weissler that this information is completely at variance with the information we have from McCrone and from our laboratories. I asked him if it is possible for our experts to talk with Sperry Rand to resolve this question. He did not encourage this approach and said that he has the photographs in his office.

I told him that we will be in touch with him as soon as possible, either tomorrow or early next week. He said he will be available the first 3 days of next week but he may not be available after that.

Dr. R. A. Fuller

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August 24, 1972

I asked him if he has heard from Dr. Lewin. He said, "Nothing definite, but he may have reported on optical microscopy; however, you know these fibers cannot be seen by optical microscopy."

W. Nashed

wn/cw

cc: Mr. D. Clare  
Mr. H. Stolzer  
Dr. A. Goudie  
Dr. G. Hildick-Smith  
Dr. R. Rolle  
Mr. R. C. Stites  
Dr. T. H. Shelley  
Mr. W. Steinberg  
Mr. E. G. Vimond  
Mr. S. C. Smoyer

# Exhibit 86

SEP 27 REC'D

*Johnson Johnson**Asbestos in talc*

New Brunswick, N.J.

September 25, 1972

**Subject:** SHOWER-TO-SHOWER/Asbestos  
FDA Meeting, September 21, 1972

Memo to File

Drs. Fuller, Hildick-Smith, and I met with Dr. Schaffner before the formal meeting. We requested that other industry representatives and CTFA not be present at our meeting. Dr. Schaffner said that he was not aware that we had made a point of this with Dr. Weissler when this meeting was set up. He said it would be embarrassing to him to withdraw the invitation. We agreed on the basis of no participation by CTFA and other industry representatives in the discussion.

We also requested that, in view of the fact that our data are now conclusive and contain new information on the composition of Italian talc which may explain the errors of Dr. Lewin, we be allowed to present the data first, to give Dr. Lewin a chance to gracefully withdraw from his position. Dr. Schaffner agreed.

The meeting was started on time and we were asked to present our data. The data were presented by our consultants in the order set up by Drs. Shelley and Goudie in a meeting on September 20 as follows:

1. Dr. Pooley reviewed in detail his comprehensive examination of the Italian mine, showing that it contains no deposits of chrysotile asbestos and very minor amounts of tremolite. He stated that mining is done by hand selection of rocks, which reduces further the likelihood of significant tremolite in the powder. He pointed out that the mine contained two species of chlorite ore which show X-ray peaks which could be confused for chrysotile asbestos. He also mentioned that the Italian Mining Institute at Turin has also determined no chrysotile asbestos in the mine. He presented data on SHOWER-TO-SHOWER and Italian talc samples provided by Johnson & Johnson England dating back to 1949, establishing absence of chrysotile asbestos by various techniques (EM, diffraction X-ray, and microscopy).

Memo to File

- 2 -

September 25, 1972

2. I reported on a communication from our supplier citing an analysis indicating absence of chrysotile asbestos in the talc supplied to us (actually this report was signed by Dr. Lewin but I did not mention this fact). I also reported that analysis of Italian talc at Harwell.A. E. C. supported Dr. Pooley's findings.

3. Dr. Brown (Princeton) and Dr. Buerger (M.I.T.):

X-ray camera technique - no chrysotile asbestos.

X-ray special techniques - no chrysotile asbestos

4. Mr. Caneer presented his findings on SHOWER-TO-SHOWER:

X-ray - step scan - no chrysotile asbestos.

Petrographic - no chrysotile asbestos.

5. Dr. McCrone, of McCrone Associates, presented a petrographic technique which is specific to chrysotile asbestos detection. He also had a demonstration with his own microscope for Dr. Schaffner to look at. He stated that SHOWER-TO-SHOWER contains no chrysotile asbestos.

6. Dr. Ian Stewart, of McCrone, presented his data by electron microscope and diffraction, as well as petrographic and X-ray, showing absence of chrysotile asbestos.

7. Dr. Schelz of Johnson & Johnson presented his technique of determining chrysotile by DTA. He showed that adding one percent chrysotile to our SHOWER-TO-SHOWER clearly showed in the DTA graph, where no peaks were apparent before, and concluded that SHOWER-TO-SHOWER contains no chrysotile.

Dr. Lewin provided two handouts of his analysis of two lots of SHOWER-TO-SHOWER, C512Z and 0709X1. In both cases he reported the presence of two percent chrysotile. His findings showed an X-ray diffraction pattern for both lots where a peak was labeled "chrysotile?". However, with the microscopy work, he could see it. He proposed a theory that chrysotile was in the process of being formed inside the talc platelets in a new form. Drs. Pooley and Hildick-Smith pointed out that only fibrous chrysotile is implicated in lung problems. Dr. Lewin had no comment.

Memo to File

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September 25, 1972

Dr. McCrone reviewed the data by Dr. Lewin and pointed out a logical explanation for what Dr. Lewin was seeing, namely, the talc had not one but three refractive indices, and Dr. Lewin's observations only indicated this fact and not the presence of chrysotile. Dr. Stewart pointed out that Dr. Lewin's photographs indicated only talc shards.

Several more questions and comments were made by Dr. Buerger, Dr. Brown, and Mr. Caneer, criticizing Dr. Lewin's conclusions. Dr. Brown was very positive in his statement that the X-ray pattern presented by Dr. Lewin clearly showed the absence of chrysotile.

The meeting was beginning to deteriorate into a nonfruitful pathway. I interrupted to suggest a compromise, namely, that Dr. Lewin has carried out the procedure we had agreed on in the last meeting. It was obvious that the X-ray scan did not show definitive chrysotile, that microscopy was indicated, and since Dr. McCrone is very familiar with this technique, I suggested that the decision be made that Dr. Lewin work with Dr. McCrone to establish the best microscopy technique to be followed. Dr. Schaffner obtained agreement from Drs. Lewin and McCrone to implement this suggestion.

The meeting with our consultants was reconvened later at the hotel and they were asked to review their impressions of the meeting. They were unanimous in their criticism of Dr. Lewin and his findings, and they all individually agreed to present their views in writing. Dr. Fuller suggested that we convey these views to Dr. Schaffner and indicate that Johnson & Johnson will not accept any publication of Dr. Lewin's findings, which we consider to be an outright lie.

I called Dr. Schaffner the next day and conveyed that message. After thinking about it, Dr. Schaffner asked "Could we have these views in writing?" I said, "Yes" and he said "Could you put together all the reports and the views of the experts in one submission?" I said "yes."

I believe that Dr. Schaffner is now fairly convinced that Dr. Lewin's findings are not reliable. I don't expect that he will allow the release of Dr. Lewin's report.

Also, the assay scheme which will result will be acceptable to both FDA and industry.

*W. Nashed*  
W. Nashed

wn/cw

**JNJ000086531**

**Metadata**

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# Exhibit 87

TALC ANALYSIS (ASBESTOS)

PRODUCT NUMBER 1615  
PRODUCT ORIGIN Italy  
DATE June 12, 1972  
LAB. REPORT NO. WCD 6/72-1  
CODE IDENTIFICATION 1615  
PRODUCT LOT NO.  
WORK PERFORMED BY E.S. Laboratories  
INVOICE NO. 1428

X RAY DIFFRACTION ANALYSIS (PERCENT)

TREMOLITE	N.D.
CHYSOTILE	1
ALPHA QUARTZ	1
CHLORITE	4
DOLOMITE	1
MAGNESITE	5

ND NON-DETECTED

CURVE FILED IN FOLDER NO. 7220

ES LABORATORIES XRD C 7220

8 S. Maple Ave.  
Marlton, N. J.

## CHEMICAL ANALYSES

609-983-3616

XRDC 7220

Whittaker, Clark & Flanigan

#4609 Talc

6-9-72

Talc 86-%  
Phlogopite 2-%  
Dolomite 1-%  
Clay 4-%  
Magnetite 5-%  
 $\alpha$  Quartz 4-%  
Chrysotile 1-%

at sample  
of talc

234 Talc Dolomite  
200 Phlogopite  
2196 Magnetite  
2171 Clay  
2110 Phlogopite  
2103 Chrysotile  
2101 Dolomite

40°

45°

# Exhibit 88

**JNJAZ55\_000006532**

**Metadata**

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*Johnson & Johnson*  
157916  
Benelux B.V.

Amersfoort / Postbus 188 / Nijverheidsweg Noord 86 / Telefoon 03490-14847 (4 lijnen) Telex: 40049 Jandj. nl.  
 Telegramadres: Jayanjay-Amersfoort / Bank: Airo Bank N.V., Amersfoort / rek.nr. 43.20.35.400 / Postgiro 413162 / K. Amersfoort nr. 16534

Mr. J.H. Smids,  
 to  
 Mr. H.L. Farlow.  
Brussels.

Xx G. Lee  
 Nashed  
 Held Smith  
 Gordis  
~~De Zeeuw~~ To Take

UW REF.

ONZE REF. MJMO/ThE

AMERSFOORT, December 13, 1973.

subject: asbestos in baby powder.

Dear Worth.

Below a summary about this subject.

During the month August the Dutch Consumer Organization has informed us that they have determined asbestos in JOHNSON's Baby Powder.

According to their first test the content was 1,59%.

On our request they have tested another sample and the result of this second test was 0,3%.

During the period August/November we have had continuous contacts with them and we have supplied them with all the data and comments we received from Johnson & Johnson U.S.A. and Johnson & Johnson U.K..

We also asked them clearly not to make any publications about asbestos in baby powder, before we agreed with their findings.

Because they did not accept our arguments against their method of testing we have proposed a discussion between our experts and theirs.

We have tried this several times.

RECEIVED

DEC 27 1973

W. NASHED  
 JOHNSON & JOHNSON

Johnson & Johnson  
Benelux nv

157917

VERVOLGBLAAD 1.

2 days after the publication date we received a letter from them in which they inform us that they did not see any reasons to have a discussion about this matter.

This week we got their permission for a discussion with the laboratory which has carried out the tests.

This laboratory is the Central Institute of T.N.O. Delft.

This laboratory belongs to an independent organization which is subsidized by the industry and government.

This organization accepted a discussion about the subject.

So an appointment is scheduled for December 19.

The meeting will be joined by:

Mr. Pooley and Mr. Sloan of Johnson & Johnson England;  
Mr. Isings and Mr. v.d. Burg of T.N.O. Central Laboratory;

Mr. Meijer of T.N.O.;

Mr. Groeneveld of the Dutch Consumer Organization;

Mr. Smids and Mr. Oerlemans of Johnson & Johnson Holland.

Attached you will find a translation of the publication of the Dutch Consumer Organization.

I expect this letter explains the situation.

Kind regards,

yours sincerely,



M.J.M. Oerlemans.

cc.: Mr. I. Sloan, J&J, Portsmouth;  
Mr. P. Mc Kenna, J&J, Slough  
Dr. T. Shelly, J&J, New Brunswick;  
Mr. C. Foster, " " "

\*Trademark.

**JNJAZ55\_000006534**

**Metadata**

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the Dutch Consumer Organization.

#### BABY POWDER

Even today books about baby-treatment state that baby powder is an efficacious remedy against red buttocks.

Therefore baby powder still belongs to the baby treatment products. However, recently alarming press articles spoke about hexachlorophene and borax which some trade marks should contain. And also publications about asbestos in talcum powder caused commotion.

As a result, various young mothers questioned us about the products they are using. We are answering these questions hereunder.

#### BRANDS AND PRICES

In the table the examined brands are stated together with the price per box. Because the contents of the boxes is different, also the price of 100 g powder is stated.

Usually refilling for a box can be obtained.

Also the price per 100 g refill-powder is stated in the table. Since we started our investigation, the production of some powders has been stopped. In as far as they were still obtainable, we thought it useful to add these marks to our tests and we are stating the results.

#### IS HEXACHLOROPHENE OR BORAX PRESENT ?

Hexachlorophene, borax and borax-combinations can be easily absorbed by the skin and can then cause poisoning symptoms. This absorption by the skin happens easily when the skin is irritated. And especially when her baby has irritated buttocks, the worrying mother will use the sprinkler with baby powder. That makes hexachlorophene and borax in baby powder more than undesirable.

As we can see it now, the use of both substances in cosmetic products will be officially limited within short. They will even be forbidden in baby products.

Various manufacturers, in whose products we did find hexachlorophene, informed us that they stopped their production or changed to another combination, anticipating the official regulations. In the near future most probably all baby powders will be free from the poisonous hexachlorophene and borax.

But it is not so far yet.

In the table we indicate the brands of the tested samples in which we found hexachlorophene, borax or both.

WHAT ABOUT ASBESTOS?

Talcum powders, which are used in the industry, can contain high percentages of asbestos.

This asbestos can be natural or can be added.

Whilst working with these powders, special security measures have to be taken, because asbestos fibres can cause pulmonary affections.

In view of the alarming press articles about asbestos in industrial talcum powder, we also tested our baby powders on asbestos.

They contained indeed asbestos fibres, but the quantity was so slight that we believe that the manufacturers pay sufficient attention to their choice of raw material.

Comparatively most asbestos we found in Scaldis, but also in this product the quantity was not alarming.

CONCLUSION

In view of the expected legal measures, in the future no hexachlorophene or borax will be allowed in baby powders.

At present it is still the case sometimes.

Also as far as asbestos is concerned, there seems to be no reason to worry.

THAT'S BETTER

Baby powder cannot prevent or cure red buttocks.

On the contrary: too much powder closes the pores, which makes the irritation even worse.

Best thing to do is to change the baby often, to dress him not too warm and to use as few waterproof plastic nappypants as possible.

Those who insist on using powder are advised to do so very cautious, so that the baby is not surrounded by a cloud of powder. Keep the powder out of reach of the child.

Whenever the baby sprinkles himself he can easily suffocate.

BE CAREFUL WITH ASBESTOS

The Ministry of Public Health is working at the moment on a so-called "asbestos-resolution" which will dictate the precautionary measures as to the use of asbestos in industries, to prevent inhaling of asbestos.

This resolution will only apply to the industry and not to safety at home, although protection against asbestos in the private sector is also urgently desired. For asbestos is worked up in a great number of things in our homes with which we come into touch.

Because it is proof against heat, wastage and aggressive chemical substances, asbestos is used a.o. for anti-fire materials, isolation materials and car braking systems.

Kind and price of the material made it also useful for a great number of applications in the house-building industry. Also the "do-it-yourself" man uses asbestos: worked up in very many different articles.

Those who work with this material often do not know that they handle asbestos, so a warning for caution has to be given.

We think therefore that a label, indicating a warning, is necessary. These warnings must tell the user that inhaling of asbestos-dust is a risk for the health.

In general the vibration-hairs of the bronchia can purify the entering polluted air. But asbestos-dust can be so small that the vibration-hairs can not catch them.

Therefore, people who daily work with asbestos can catch a so-called professional illness: "asbestose".

But also after less intensive contact with asbestos, pulmonary affections can be caught.

This can become manifest even after tens of years.

Except via warnings, the hurtful results of the use of asbestos can also be prevented by replacing this material - if possible - by something else.

For many professional purposes there are already replacement-materials available; and for others, e.g. in the house-building industry, the asbestos-fibres can be tied so that the development of asbestos-dust can be prevented.

Also hobby-shops and "do-it-yourself" shops should use replacement-materials.

If that is not possible, the "do-it-yourself"-man must be aware of the fact that thin asbestos-dust is liberated during activities as scouring, sawing, boring and filing.

That's why the material must be used wet, and in the open air so that the chance for inhaling is as small as possible.

In the household, asbestos-sheets are often used as flame-diminishers. These sheets can be easily replaced by small metal grills or double metal sheets.

**JNJAZ55\_000006537**

**Metadata**

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# BABY- POEDER

Nog altijd vermelden mochten over babyverzorging dat babypoeder een probaat middel in de stegeen rots biljetjes is. In de tijd daarvergaging middelen neemt babypoeder dan ook nog steeds een vaste plaats in. Kom geleden echter was er al meer oefte berichten in de pers over het gebruik van boorzuur. Dat in sommige weken verkeert nu de En ook een publiekheid over best talkpoeder bracht de gemoeiden in beweging. Naar aanleiding van dit alles bereidde ons fabrieken van jonge moeders die wilden weten wat het gesteld was met het gebruik dat zij gebruikte. We beantwoordden die vragen in het onderstaand

## merken en prijzen

In de tabel staan de onderzochte merken met de prijs per strooibus. Omdat de inhoud van de strooibussen verschilt, daarnaast tevens de prijs per 100 gram. Meestal is een navulling voor de strooibus verkrijgbaar. Ook de prijs per 100 g van zo'n navulling staat in de tabel vermeld.

Sinds wij ons onderzoek startten is de produktie van enkele poeders gestaakt. Voorzover ze nog wel verkrijgbaar bleken, kwam vermelding van de resultaten ons toch niet overbodig voor.

## zit er hexachlorofeen of boorzuur in?

Hexachlorofeen, boorzuur en boorzuurverbindingen worden gemakkelijk door de huid opgenomen en kunnen dan vergiftigingsverschijnselen veroorzaken. Dit opnemen door de huid gebeurt vooral gemakkelijk wanneer ze geirriteerd is. En juist in het geval van geirriteerde babybiljetjes zal de bezorgde moeder de bus met babypoeder hanteren. Dat maakt hexachlorofeen en boorzuur in babypoeder dus dubbel ongewenst.

Zoals het er momenteel naar uitziet, zal het verwerken van beide stoffen in kosmetische produkten binnenkort aan banden worden gelegd. In voor de baby bestemde produkten zullen ze zelfs helemaal worden verboden. Verscheidene fabrikanten in vier produkten wij nu nog hexachlorofeen aantroffen, deelden ons mee, dat zij, vooruitlopend op deze te verwachten maatregel, hun produktie reeds hebben gestaakt of op een andere samenstelling zijn overgegaan. In de nabije toekomst zullen vermoedelijk

157924

**dat is beter**

Met babypoeder vallen rode billempjes niet te voorkomen of te genezen. Integendeel, als er veel met poeder wordt gewerkt worden de poriën afgesloten, waardoor de irritatie alleen maar erger wordt. Wel valt er wat te bereiken door de baby dikwijls te verschonen, niet te warm te kleden en zo weinig mogelijk gebruik te maken van waterdichte plastic luierbroekjes.

Wie toch poeder wil gebruiken, moet de bus omzichtig hanteren, zodat de baby niet in een wolk van poeder komt. En de bus ook vooral buiten het bereik van het kind houden. Als het zichzelf onder strooit kan dat verstikking tot gevolg hebben.

dus alle babypoeders vrij zijn van het giftige hexachlorofeen en boorzuur. Maar momenteel is dat nog niet het geval. In de tabel geven wij aan bij welke merken wij nog hexachlorofeen, boorzuur of beide in de door ons onderzochte monsters aantroffen.

**zit er asbest in?**

In talkpoeders, die in de industrie toegepast worden, kunnen hoge percentages asbest voorkomen. Die asbest zit er van nature in, of is er aan toegevoegd. Bij het werken met deze poeders dienen veiligheidsmaatregelen te worden genomen,

omdat asbestvezeltjes longaandoeningen kunnen veroorzaken.

Gezien de verontrustende berichten in de pers over asbest in industriële talkpoeder, lieten wij onze babypoeders ook op asbest onderzoeken. Zij bleken inderdaad asbestvezeltjes te bevatten, maar in dusdanig geringe hoeveelheden dat we mogen aannemen, dat de fabrikanten aan de keuze van hun grondstoffen in dit opzicht wel behoorlijk aandacht besteden: Verhoudingsgewijs de meeste asbest troffen wij nog aan in Scaldis. Ook hier ging het echter om weinig alarmerende hoeveelheden.

**Konklusie**

**Gezien de te verwachten wettelijke maatregelen zal er in de toekomst geen hexachlorofeen en boorzuur meer in babypoeders mogen zitten. Nu is dat soms nog wel het geval.**

**Ook wat de asbest betreft blijkt er weinig reden tot ongerustheid.**

**voorzichtig met asbest**

Op het Ministerie van Volksgezondheid en Milieuhygiëne wordt gewerkt aan een „asbestbesluit” dat het nemen van voorzorgsmaatregelen, voorstrijft bij de verwerking van asbest in bedrijven. Dit om het inademen van fijn asbeststof te voorkomen. Dit besluit zal alleen voor de industrie gelden en geen betrekking hebben op de veiligheid in huis. Terwijl ook bescherming tegen asbest in de privé sektor dringend gewenst is. Asbest wordt namelijk verwerkt in een oneindige reeks van zaken, waarmee we in huis in aanraking komen. Omdat het bestand is tegen hitte, slijtage en agres-

sieve chemische stoffen, wordt het onder andere gebruikt voor brandvertragende isolatiemateriaal en remvoerlingen. Aard en prijs van het materiaal hebben verder geleid tot talloze toepassingen in de woningbouw. Ook de doe-het-zelver maakt gebruik van asbest: hij koopt asbestplaat voor zijn schuurtje, asbestplug, asbestkoord voor de knalpijp van de brommer, asbestdoek als hij aan het lassen of solderen slaat, asbestcement om een schoorsteenmantel te bouwen, enz. Wie met deze materialen werkt, weet meestal niet dat het om asbest gaat en dat voorzichtigheid dus geboden is.

Een etiket met waarschuwingen is daarom onzes inziens wel het minste wat we mogen verwachten.

Die waarschuwingen moeten de gebruiker erop attenteren dat het inademen van asbeststof risico's voor de gezondheid met zich brengt. Over het algemeen kunnen de trilharen van de luchtwegen de binnenkomende lucht wel van daarin zwevende vaste bestanddelen zuiveren. Asbestdeeltjes kunnen echter zo klein zijn, dat ze niet meer door de trilharen worden gevangen. Mensen die beroepshalve intensief met asbeststof in aanraking komen, kunnen hierdoor een beroeps-

**BABYPOEDER**

	prijs per strooibus	prijs per 100 g in strooibus	prijs per 100 g in navulling	aanwezigheid van hexachlorofeen	boorzuur
BABYDERM	2,—	1,66	1,—		
BABYLANE	9,—	8,—	—	x	
JOHNSON AND JOHNSON	1,90	1,90 <sup>1)</sup>	0,95 <sup>1)</sup>		
MENTHO 10	1,25	1,60	—		
NATUSAN	2,23	2,62	1,92		
NIVEA BABYFINE	1,65	2,20	1,20	x	
NOTYOL	2,09	1,05	0,62		x
NURSIL	2,33	2,33	—		
PENATEN	2,—	2,66	1,33		
PUROL	2,—	2,22 <sup>2)</sup>	—		x
SCALDIS	1,35	1,50	—		
UNICURA	2,50	2,50	1,87	x	x
VASENOL	2,04	1,77	0,95	x	
ZWITSAL	1,90	1,65	1,03 <sup>3)</sup>		

<sup>1)</sup> in bus en navulling van 250 g: f 1,26 resp. f 0,80<sup>2)</sup> in bus van 180 g: f 1,70<sup>3)</sup> in verpakking van 200 g: f 0,76

x = aanwezig

ziekte – asbestose – optreden. Maar ook bij tijdelijke en minder intensieve blootstelling kunnen longaandoeningen optreden. Deze laatste openbaren zich vaak pas na tientallen jaren.

Behalve door waarschuwingen kunnen de nadelige gevolgen van asbest ook voorkomen worden door dit materiaal waar mogelijk door ander te vervangen. Voor vele professionele doeleinden zijn al goede vervangingsmateriaal beschikbaar en bij andere, bijvoorbeeld platen en buizen in woningen, kan de asbestvezel gebonden worden, waardoor het ontstaan van

asbeststof voorkomen wordt. Ook hobby-shops en „doe-het-zelf“ zaken zouden naar vervangingsmaterialen toe moeten. Waar dat niet mogelijk is, moet de doe-het-zelver zich er goed van bewust zijn, dat fijn asbeststof vrij komt bij het schuren, zaaghen, boren en vijlen. Daarom moet het materiaal zo mogelijk nat verwerkt worden en in de buitenlucht, zodat de kans op inademen zo klein mogelijk is. In huis worden ook vaak asbestplaatjes gebruikt als vlamverdeler. Deze kunnen gemakkelijk worden vervangen door metalen roostertjes of dubbelwandige metalen plaatjes.

## AH-bemoeienis met PMC misère

In ons nummer van november 1972 publiceerden wij over de „misère met de PMC/Castor wasautomaten en afwasmachines.“ Het ging daarbij niet alleen over de vele mankementen die ons werden gemeld, maar ook en vooral om de wijze waarop PMC deze zaken behandelde. De Castor 2000 en 2000 de Luxe wasautomaten bleken – als gevolg van een konstruktiefout, die ook bij PMC bekend was – na twee jaar vaak een nieuwe motor nodig te hebben. Maar de garantie was dan afgelopen en de bezitter kon f 200 tot f 300 neertellen. De KM 8 afwasmachine had vaak te kampen met vastgelopen sproeiarmen en een spatscherf dat als gevolg van slechte montage afbrak. Maar beide zaken werden „geen technische storing“ genoemd en daarom niet in de garantie begrepen.

Inmiddels lijkt er een andere AH-wind door de PMC-winkel te waaien. Althans wat de KM 8 afwasmachine betreft, verklaarde AH zich bereid om de machine bij meer dan normale slijtage te vervangen. Bezitters van deze machine, die menen, dat er in hun geval inderdaad sprake is van meer dan normale slijtage en reeds een blauwtje bij PMC liepen, doen er daarom goed aan zich alsnog direct tot AH Supermarkt N.V. te wenden. Dat geldt ook voor hen, die destijs onze hulp inriepen zonder dat wij, gezien de toenmalige starre PMC-houding, veel voor hen konden bereiken. De klachten te richten aan: AH Supermarkt N.V., Postbus 33, Zaan-dam.

# Exhibit 89

*JRM gm w/p*  
↓  
*GL file*  
NEW BRUNSWICK, N.J. Co., Inc.

Johnson & Johnson  
BABY PRODUCTS COMPANY

September 9, 1975

SUBJECT: A.M. Langer Analysis of Talcum  
Powder Products  
- Edinburgh Meeting

Bob Dean telephoned me just before noon to-day to report a call which he had received from Fred Pooley.

Pooley has just received Langer's manuscript contribution for the Edinburgh presentation (Langer and Pooley - "Chemical, physical and mineralogical characteristics of talc") and was very concerned over its contents. Langer's paper reports on his examination of some 33 finished talcum products which he had picked off-the-shelf in the past year. Seventeen of these are U.K. products and the rest, U.S.. Langer is claiming that he has detected chrysotile and amphiboles. He has identified the products by name and claims that he has detected tremolite and anthophyllite in Johnson's Baby Powder. As yet, Bob Dean has not been able to identify whether this JBP is U.K. or U.S. sourced. Pooley made this confidential disclosure to Dean, so that Bob could forewarn the U.K. companies and be prepared with refuting data. Obviously, the claim of chrysotile contradicts Pooley's previous findings.

Langer has also been devious in reporting the finding of over 1% Zinc in one of the products - obviously a formula additive -which was nevertheless reported by him as a trace metal contaminant!

Bob Dean will be speaking to Pooley again and will attempt to have access to Langer's manuscript. Bob will get more information from Pooley on the source of the JBP, the method of analysis and the level detected, before calling us back.

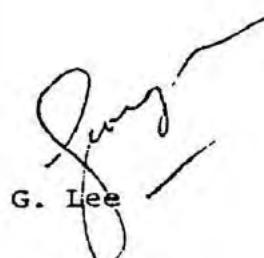
J&J-0073951

JNJNL61\_000064366

-2-

We were advised of this information so that we can prepare our strategy for Edinburgh when Langer presents this data.

I have called George Sandland this afternoon to press him for copies of the U.S. manufacturers' and producers' testimonies of "no chrysotile in cosmetic talc". Since Langer uses X-ray Diffraction Step-Scanning for lower level of detection, I have asked Bob Rolle to initiate immediate testing of talc from the last year at this higher sensitivity.



G. Lee

pam

cc: Mr. W.H. Ashton  
Dr. G. Hildick-Smith  
Dr. D.R. Pettersen  
Dr. F.R. Rolle  
Dr. B. Semple  
Dr. W.C. Waggoner

J&J-0073952

JNJNL61\_000064367

# Exhibit 90

Alice M. Blount, Ph.D.  
Mineralogist

April 23, 1998

M. Raymond Hatcher  
MEHAFFY & WEBER  
2615 Calder Avenue  
P.O. Box 16  
Beaumont, Texas 77704

Dear Mr. Hatcher:

RECEIVED

APR 27 1998

MEHAFFY & WEBER  
BEAUMONT, TEXAS

According to your letter of March 31, 1998, I have written and enclosed a report on the occurrence, regulation and up-to-date scientific view of asbestos, amphiboles and "intermediate" fibers. I have also enclosed copies of my 1990 and 1991 papers, one of which I am sure that you already have. The 1991 paper was written because I became aware that it was a common opinion among industrial hygienists that industrial talcs were better than pharmaceutical and cosmetic talcs because there was a regulation for the former and not for the latter. I knew that this was not the case and wanted to set the record straight.

Although my papers report an improved method for analysis, the determinations for the sample labeled *I* (Johnson & Johnson's Vermont talc) have been done by the traditional methods as well (see Table 2, page 567 in the 1990 paper). As I told you, I believe that Johnson & Johnson's Vermont talc contains trace amounts of asbestos which are well below those specified by OSHA. It should be noted that the proposed FDA regulation, which was never finalized, also specified the same 0.1% limit for amphibole asbestos as OSHA.

I may be away for short periods during the coming weeks, but I do check for messages on my work phone at the number you have been using.

Sincerely yours,

*Alice M. Blount*

Alice M. Blount, Ph.D.

Box 3437  
Rutland, VT 05701  
Phone: 802-747-4857

e-mail: [amblount@together.net](mailto:amblount@together.net)

J&J-0020831

# Exhibit 91

Meeting with Dr. Langer on July 9  
Concerning Analytical Analysis of Talc

On Friday, July 9, I visited Dr. Arthur Langer, Mt. Sinai School of Environmental Science. The expressed purpose of this visit was to observe the preparation of tissue sections (from Tenovus Institute) for electron microscope examination. However, the subject of "asbestos" in JOHNSON'S\* Baby Powder from Dr. Langer's point of view was also explored.

Analysis of the Tenovus Tissue Samples

34907 11

Only the tissue labeled submitted by  
Uterus 1 Surface  
us was of sufficient size to be prepared for electron microscopy. The tissue was sectioned and prepared by the method of Dr. F. Pooley. This method involved removal of the wax embedding medium, ashing away the majority of the organic matter in a 450°C muffle furnace, casting a polyvinyl alcohol (PVA) film on the ashed section, carbon coating the section held in the hardened PVA film, and transferring the section to an electron microscope grid by floatation on hot water. This technique if properly executed leaves sufficient relic of the tissue so that the trained eye can tell where in the tissue an observed particle is located. As no replication step is involved, ambiguities in the final preparation related to this step are removed.

Viewing the grids prepared on Friday at about 11,000X in the electron microscope, we were unable to find any particles which could obviously be identified as talc, however, fibrous structures were observed under higher magnification (30,000X and up) these fibers were identified by Dr. Langer as chrysotile. His method of identification is based on his experiences in observing the fibers of "pure" chrysotile under similar experimental conditions.

The characteristic density profile across the diameter of the fibers is observed at high magnification, and indicates the presence of tubular chrysotile. Evidence such as this was observed in at least one other field in the one sample which was examined.

Light and Electron Microscopy of JOHNSON'S\* Baby Powder

Dr. Langer demonstrated his technique for observing "fibrous minerals" in JOHNSON'S\* Baby Powder. He shook a small amount of the talc from the container onto a glass slide, applied a drop of immersion liquid (index of refraction in the neighborhood of 1.52) and a cover slip. After examining the sample in the light microscope for a short time he stated that he could pick up some non plate particles that could be amphiboles other asbestos forms, or fibrous

talc (or, in my opinion, talc plate fragments). He said he estimates the amount in this sample to be on the order of one or two percent. He indicated that he has observed the amount of "fibrous" content to vary from sample to sample. He had examined a JOHNSON'S\* Baby Powder sample and that of a competitor (which resulted in Kretchmers press release) by the method stated above. In Johnson's Product he estimated 5%, in the other 25% of the particles to be fibroic of which some could be "asbestos". I stress that he makes no attempt to actually count the particles or to identify the fibers at this level of magnification.

Using electron microscopy Dr. Langer has demonstrated to me the presence of some very fine fibers at moderately high magnification which he identifies as chrysotile asbestos by the typical tubular appearance of the fiber.

Photographs taken during the session at which I was present are appended.

The JOHNSON'S\* Baby Powder sample was prepared for electron microscopy by sonifying a small portion of the powder in an excess of water (maybe 25 to 1) for ten minutes. The sonification served to break up agglomerated particles and to disperse the talc. A drop of the suspension was placed on an electron microscope grid and allowed to dry.

In addition to the observation of the tubular structures as an indication of chrysotile Dr. Langer also pointed out the typical thermal behavior of the fiber which is initiated by the heat generated at the sample by the electron beam. The mineral dehydroxylates and the surface of the fibers become amorphous. This process is observed as a slowly altering pattern of density in the microscope image. Eventually the crystal is so deformed by the heat that the fiber may appear to be segmented (~~see Figure 3~~). Although we did not perform selected area electron diffraction on Friday, Dr. Langer has observed these patterns from chrysotile fibers found in JOHNSON'S Baby Powder. Selected area diffraction patterns, though not necessarily specific for a mineral, do allow one to distinguish mineral fibers from non-crystalline artifact. It must again be stressed that Dr. Langer has, to my knowledge, made no particle counts with this technique either.

Summary

1. In the uterus sample from Tenovus, chrysotile rather than talc was found.
2. Chrysotile is identified in the electron microscope by its characteristic tubular appearance (at high magnification).

3. Light microscopy of JOHNSON'S\* Baby Powder indicates the presence of fibrous minerals of which, according to Dr. Langer, some could be "asbestos". Neither true quantitative or qualitative analysis was performed.
4. Electron microscopy at high magnification shows a few fibers to be present in JOHNSON'S\* Baby Powder which can be identified with chrysotile asbestos according to Dr. Langer. No quantitation was performed.

**JNJAZ55\_000005743**

**Metadata**

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# Exhibit 92

UNIVERSITY OF MINNESOTA  
**SPACE SCIENCE CENTER**



INVESTIGATION OF POSSIBLE ASBESTOS CONTAMINATIONS IN TALC SAMPLES

SCANNING ELECTRON MICROSCOPE EXAMINATION

Specimens of powdered talc were received from Johnson & Johnson Co. and from McCrone Associates. Analysis of these samples using the scanning electron microscope was requested in order to determine the possible content of fibrous crysotile asbestos contained in the talc samples. The first lot of material examined was labeled by McCrone Associates Lewin.

The samples were mounted on one half inch aluminum electron microscope stubs with silverprint glue. The glue was first placed on the aluminum stub and the sample was then pressed to the surface of the wet silver print. A jet of pure Freon was used to remove excess talc from the surface. The specimens were then shadowed with a thin layer of carbon and gold providing a conductive path to the specimen stub. The stubs thus prepared were placed in the scanning electron microscope which was operated at 20 kilovolts electron beam energy and were examined at magnifications between 20 and 25,000 times. The initial effort was directed toward detection of the presence of fibrous morphologies in the basically sheet structured talc bodies. To this end crysotile asbestos specimens were prepared as outlined above and observed in the S.E.M. as illustrated in Figure 1.

To be noted, of course, is the highly fibrous structure as opposed to the layered structure of the talc bodies. The asbestos fiber can be seen to shred both at the ends and on occasion at the center of a fiber bundle giving an appearance not unlike rope but on a much magnified scale.

Having established the general appearance of asbestos, suitable samples were selected for examination in a scanning electron microscope. A magnification of 1,000 times seems quite adequate to pick up any appreciable fibrous morphology present within the talc sample. In order to make the survey as quantitative as possible, a grid of pictures was mapped on the surface consisting of five pictures on each side of

a square covering thus 25 squares at 1,000 times magnification. Numerous fibrous structures were observed during this examination of both the original Lewin material and the Shower to Shower material supplied by Johnson & Johnson. Examples of these micrographs are shown in the following figures. Figure 2 shows one such fibrous material which is in fact split on the end and is generally within the limits of possible diameter of an asbestos fiber. The general character of the split at the end, however, rather than being shredded, gives a somewhat more solid appearance indicative of an organic fiber such as wood. Figure 3 shows an area at the center which may possibly indicate an asbestos structure. Slight differences in character, however, exist. Although the rough appearance of this body is shredded, careful examination indicates that it is more than likely an edge on view of a talc structure.

Figure 4 shows another such structure. In addition, however, at the center of the micrograph indicated by the arrow, is a small broken fiber which is too small to identify for certain as either talc or asbestos. Other such examples are seen in Figures 5 and 6. These may probably be discounted on the basis of their very short length. One such fiber which is sufficiently long to be suspect is seen in Figure 7, taken at 500 times magnification. These are, however, seldom encountered. Figure 8 and 9 show higher magnification pictures of such fibers taken at 5,000 and 10,000 times respectively. These cannot be entirely discounted although the net volume involved, even if they are asbestos fibers, is extremely small.

Figure 11 shows an example in the lower right hand corner of a fiber which is almost certainly wood. Asbestos cannot possibly take such a small radius of curvature without being entirely shredded. One rather curious fiber found during this investigation is shown in Figure 12. It is roughly the proper size and length but shows a most curious end structure. This is more than likely a talc body which has encountered an on end collision and become shredded during its processing. No evidence of microstructure indicative of asbestos was found.

CHEMICAL EXAMINATION OF FIBERS

Considering that little could be categorically determined to be asbestos in the material based solely upon morphology, efforts were made to use microchemical analyses of such fibers in the scanning electron microscope. These efforts involve the use of a non-dispersive X-ray detector, which analyzes the X-rays energy resulting from electron beam impingement. Areas as small as a 1,000 Angstrom fiber can be analyzed under suitable conditions. Figure 15 and 16 show traces of an oscilloscope picture in which the energy of X-rays is displayed along the horizontal scale and the number of X-rays arriving at the counting detector is displayed on the vertical scale. In Figure 15 an asbestos fiber was used as an object for X-ray analysis by reducing the electron scan image to a line which was aligned along the asbestos fiber. The asbestos fiber was imbedded in the talc matrix and was in fact part of the doped specimen. A number of elements can be identified from this trace. The ones which are certain to be part of the specimen itself rather than artifacts of the instrument are magnesium and silicon. This pattern was used as a standard and compared to other counts taken from suspect fibers in other fields of view. Efforts were made to maintain the geometry the same as that in the standard. An example of such an effort is seen in Figure 16. No strong similarities could, however, be shown in any fiber sample.

TRANSMISSION ELECTRON MICROSCOPY

Considering the lack of success in obtaining definitive results by scanning electron microscopy transmission electron microscopy was tried. Specimens were mounted by standard techniques of swirl dispersion on electron microscope grids covered with a formvar film. A large number of grids were examined and numerous examples of fibrous material were seen. Of the large number of grids examined, three examples of fibers which upon examination by electron diffraction could be classified as likely candidates for crysotile asbestos in the shower to shower material and one example was found in the Lewin material. These are shown in Figure 16, 17, 18

and 19. In Figures 17a and 18a, electron micrographs of the transmission type show the typical stranded appearance of crysotile asbestos. In each case, Figures 16 through 19, the diffraction pattern is closely similar to that indexed for crysotile asbestos. Figure 18a is a double exposure of the diffraction pattern and the bright field micrograph. In order to avoid confusion as to the area used in diffraction, the bright spot at the center of the micrograph is a delineation of the area used in diffraction. The diffraction pattern, however, is rotated by roughly 40° from the axis of the specimen. It is felt therefore that crysotile asbestos does exist in the specimens of shower to shower and Lewin supplied to this laboratory. It is, however, further concluded that, on the basis of samples supplied to us, transmission electron microscopy can only find a total material by volume of less than 1/100 of 1 percent crysotile asbestos in the shower to shower material and less in the Lewin material.

#### CONCLUSIONS

The extensive investigation reported here must conclude that the scanning electron microscope by itself is unable to make distinctions between asbestos fibers within samples of talc and other such fibers of wood, wool, and talc fibers. Only the shredded appearance (not found in any specimen examined other than that purposely doped with asbestos) is the sole basis for assuming the existence of asbestos in the specimens. Efforts to use non-dispersive X-ray detection yielded a negative result, and could not be used as well. Transmission electron microscopy shows less than 1/100th of 1 percent asbestos in the material given to us. Neither scanning microscopy alone or in conjunction with microchemical analysis can be reasonably expected to prove the existence of crysotile asbestos in talc.

Fig 1



AI 500X

Figure 2

9-14-51A



1,000X

L-1

Figure 3

9-134-4-C



1,000X







Figure 6-B

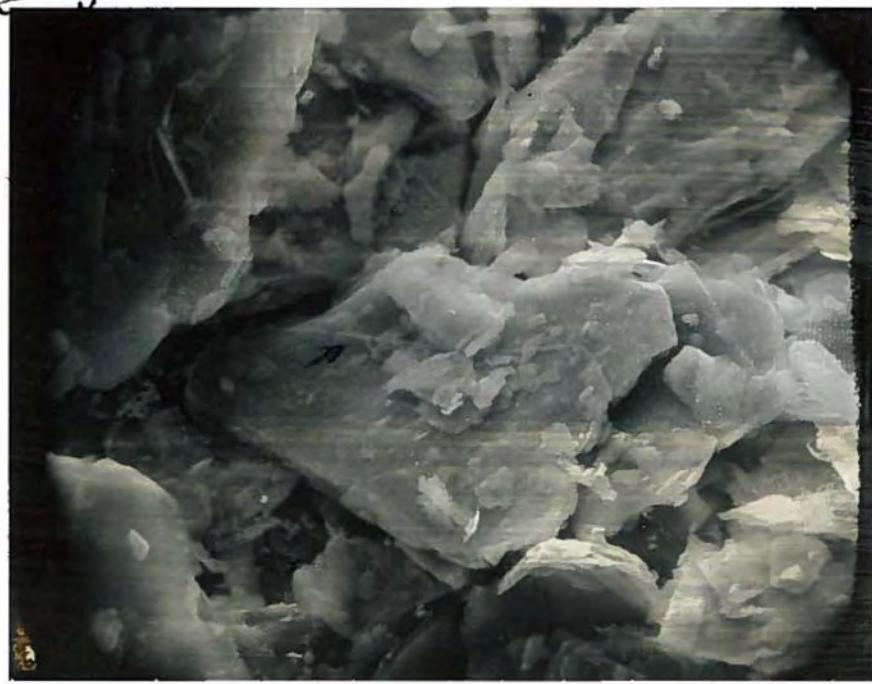
9-14-2A



1,000X

Stos

Figure 1



T4 500x

62

Figure 8



5K

5K

#3

Figure 9



10KX

9-44 #3



Figure 12



5K T6 Count 2

Figure 13



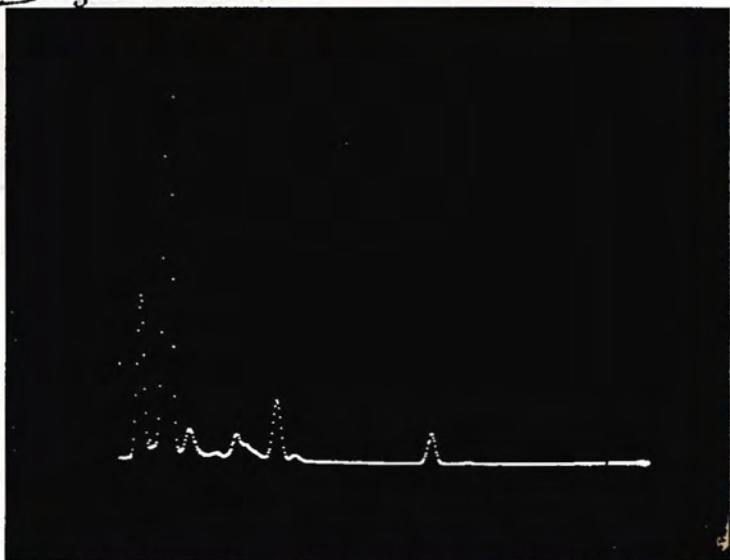
12KX 1% doped Tef.

Figure 14





Figure 15-b



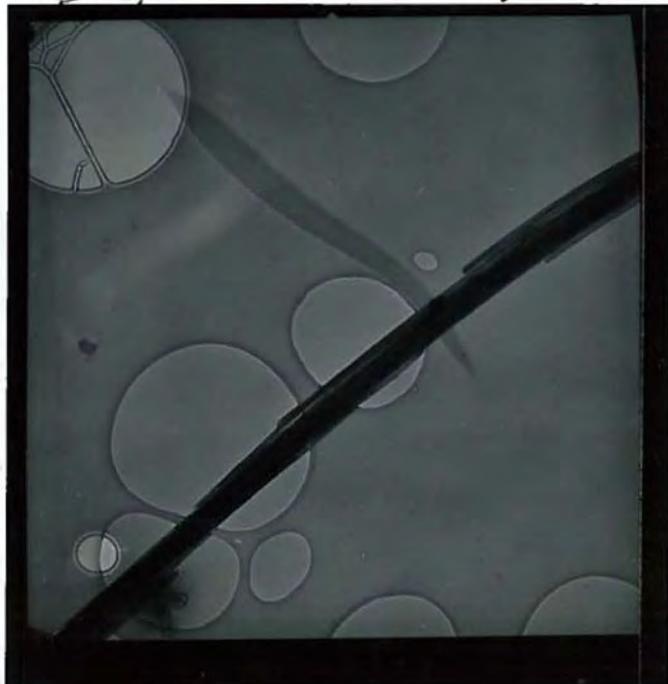
A-3 Count #10-34 3X0<sup>4</sup>

Figure 46



5 to 51  
Grid 52

Figure 17-a 4,800X



5 to 53  
Grid 52

Figure 17b



Sts 9  
Orbit 52







Tale Figure 20



Tale standard form  
Loring Grid 4

and 19. In Figures 17a and 18a, electron micrographs of the transmission type show the typical stranded appearance of crysotile asbestos. In each case, Figures 16 through 19, the diffraction pattern is closely similar to that indexed for crysotile asbestos. Figure 18a is a double exposure of the diffraction pattern and the bright field micrograph. In order to avoid confusion as to the area used in diffraction, the bright spot at the center of the micrograph is a delineation of the area used in diffraction. The diffraction pattern, however, is rotated by roughly 40° from the axis of the specimen. It is felt therefore that crysotile asbestos does exist in the specimens of shower to shower and Lewin supplied to this laboratory. It is, however, further concluded that, on the basis of samples supplied to us, transmission electron microscopy can only find a total material by volume of less than 1/100 of 1 percent crysotile asbestos in the shower to shower material and less in the Lewin material.

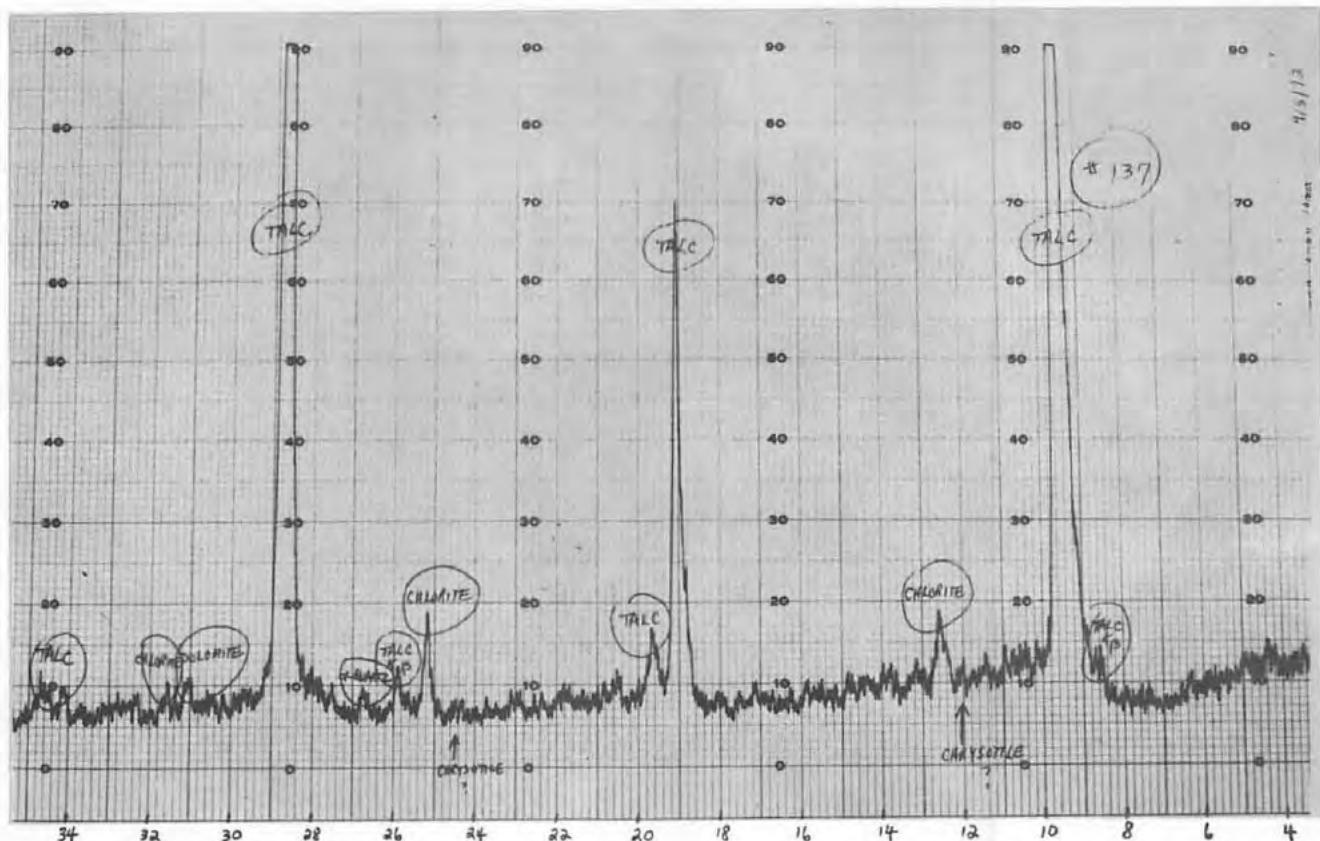
#### CONCLUSIONS

The extensive investigation reported here must conclude that the scanning electron microscope by itself is unable to make distinctions between asbestos fibers within samples of talc and other such fibers of wood, wool, and talc fibers. Only the shredded appearance (not found in any specimen examined other than that purposely doped with asbestos) is the sole basis for assuming the existence of asbestos in the specimens. Efforts to use non-dispersive X-ray detection yielded a negative result, and could not be used as well. Transmission electron microscopy shows less than 1/100th of 1 percent asbestos in the material given to us. Neither scanning microscopy alone or in conjunction with microchemical analysis can be reasonably expected to prove the existence of crysotile asbestos in talc.

SAMPLE NO. 137.

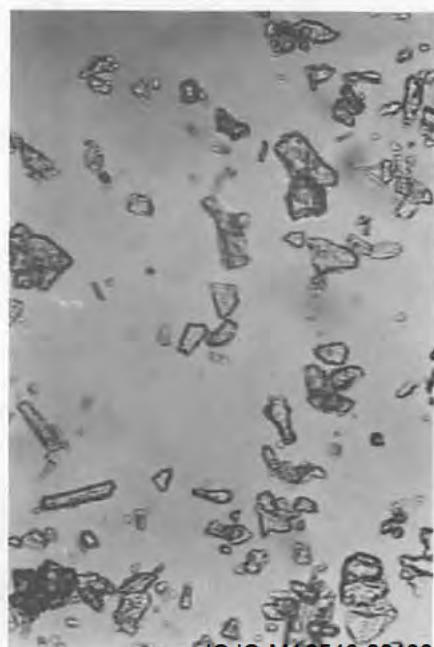
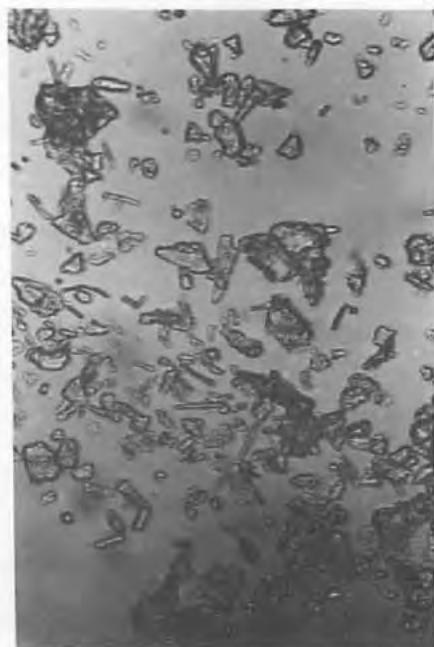
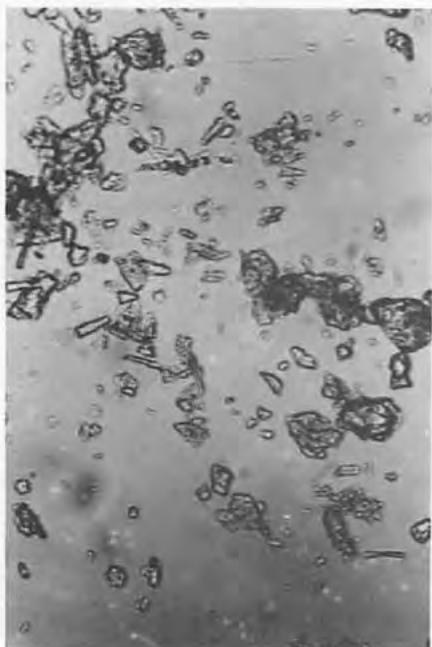
X-RAY DIFFRACTION PATTERN

5709 XY



Analytical Results: TALC 89%; CHLORITE 4%;  $\alpha$ -QUARTZ 3%; DOLOMITE 2%;  
CHRYSOTILE 2%

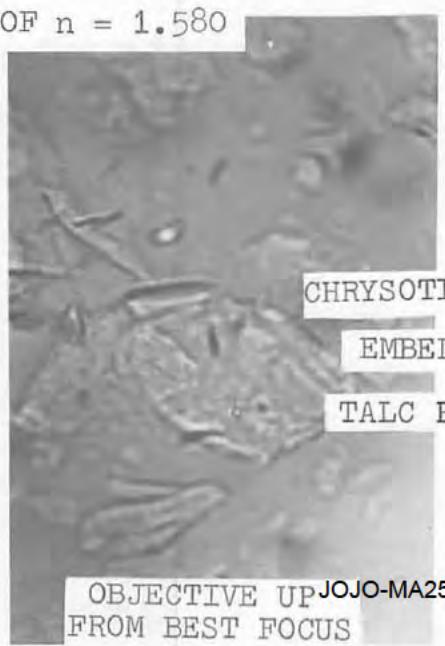
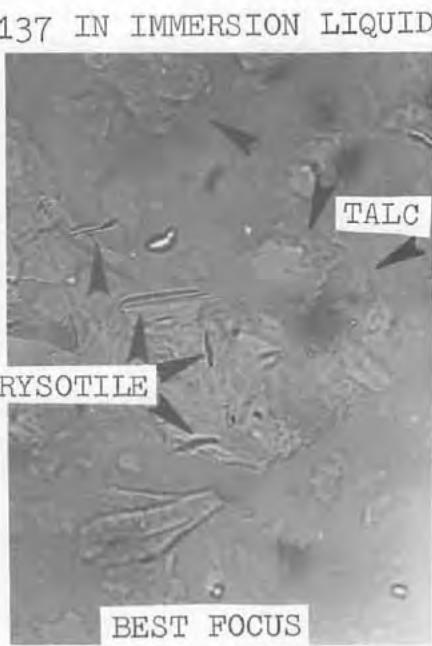
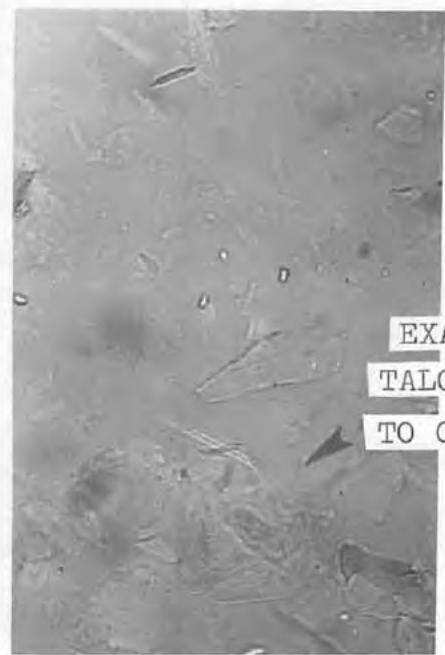
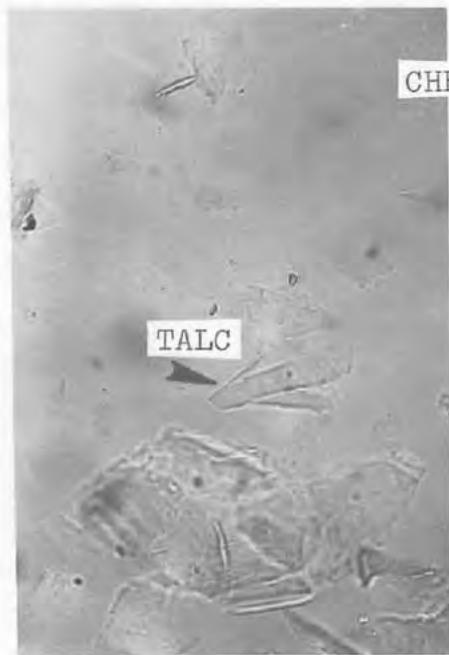
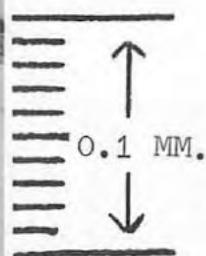
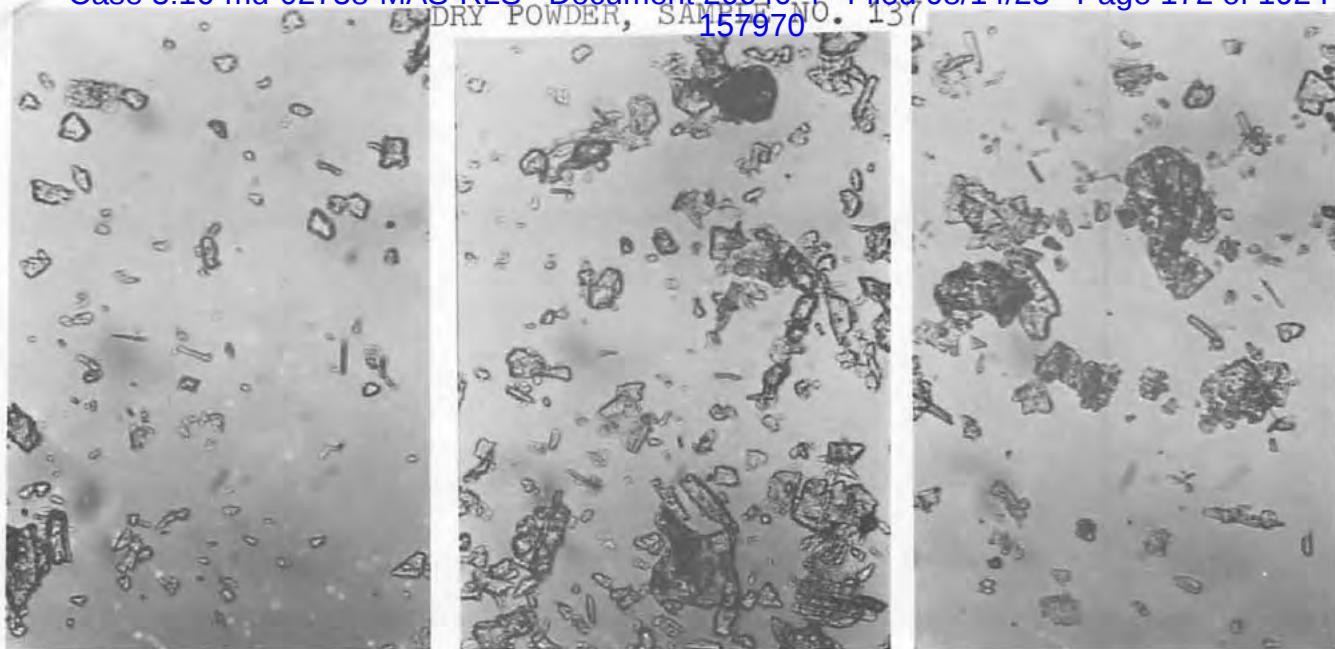
Below: PHOTOMICROGRAPHS OF DRY POWDER NO. 137



JOJO-MA2546-00138

DRY POWDER, SAMPLE NO. 137

157970



SAMPLE NO. 137 IN IMMERSION LIQUID OF  $n = 1.580$

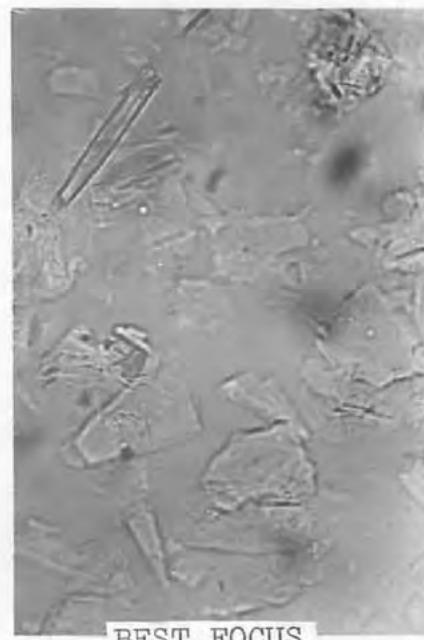
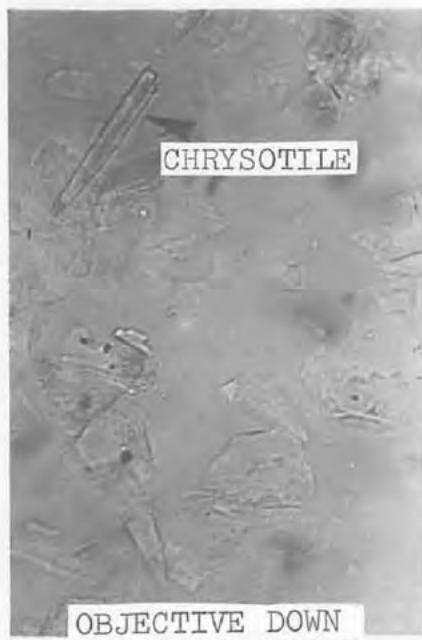
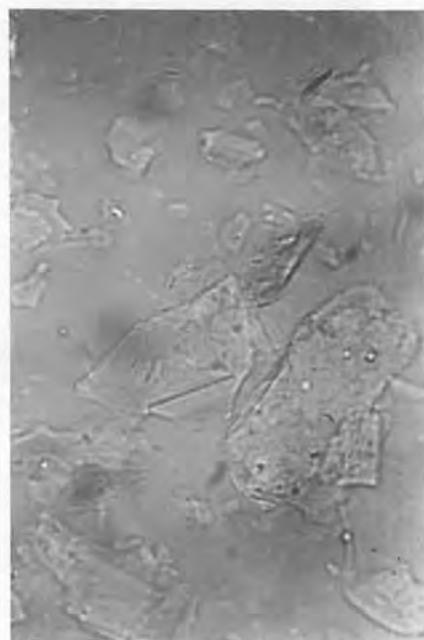
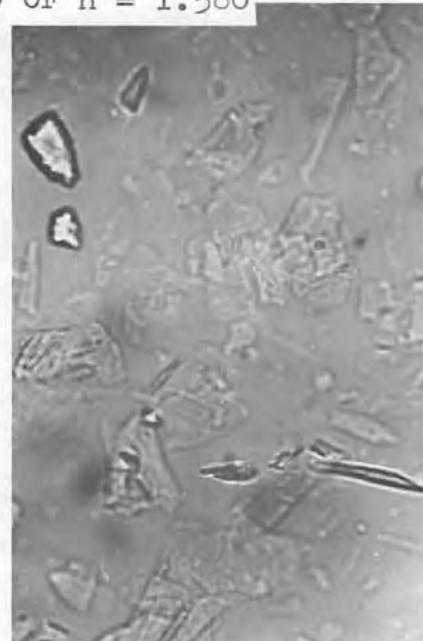
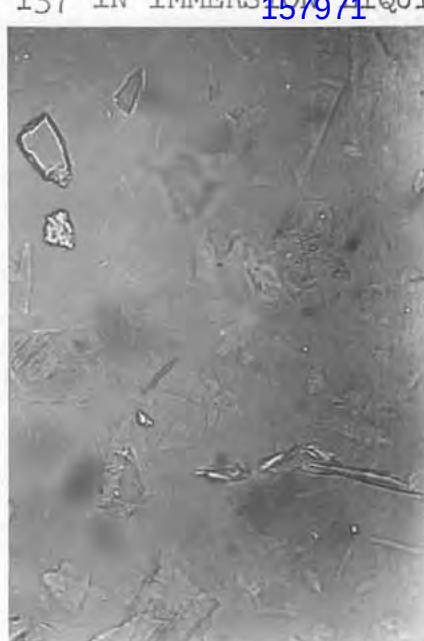
OBJECTIVE DOWN  
FROM BEST FOCUS

BEST FOCUS

OBJECTIVE UP JOJO-MA2546-00139  
FROM BEST FOCUS

SAMPLE NO. 137 IN IMMERSION LIQUID OF  $n = 1.580$

157971

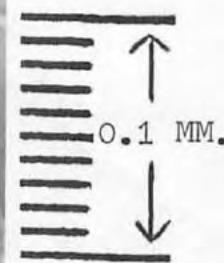


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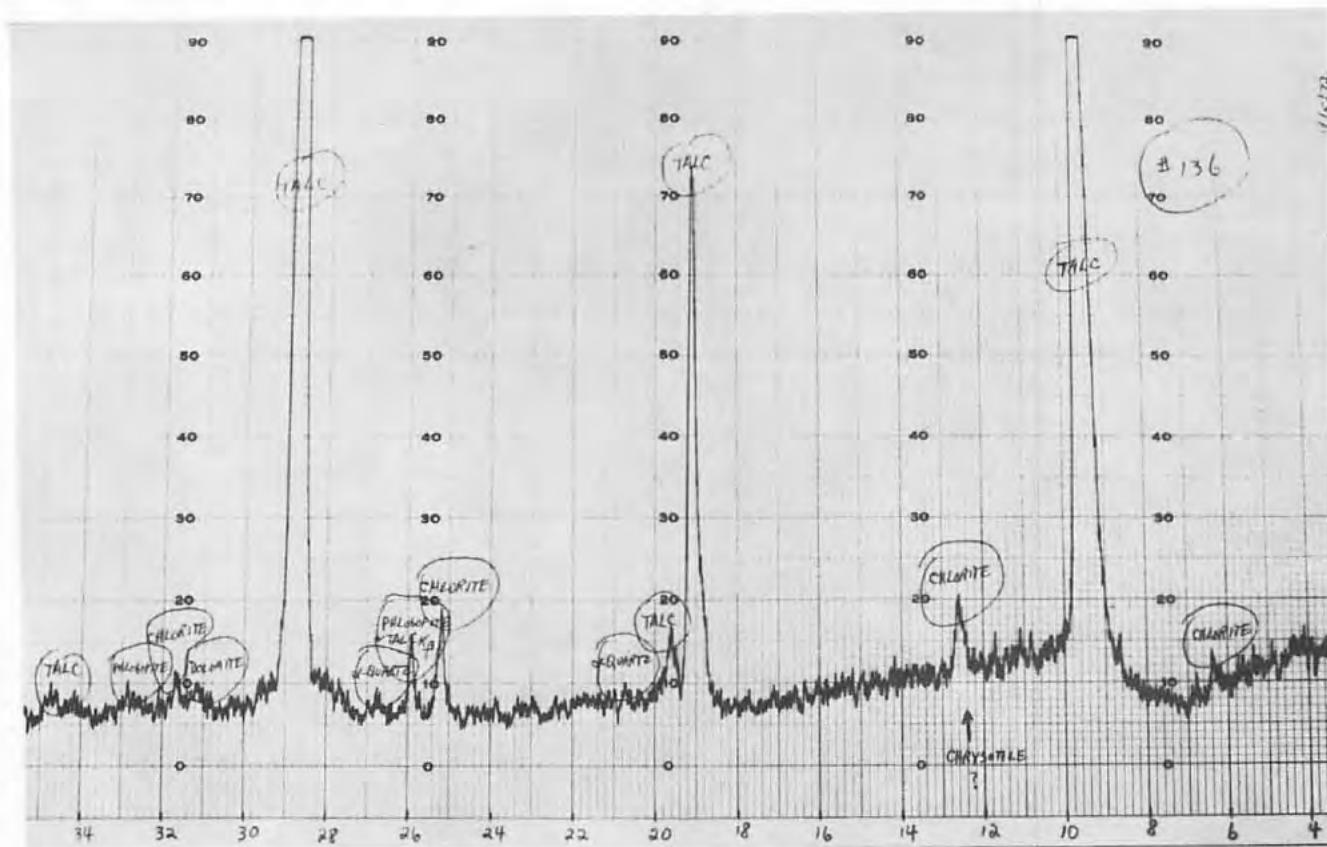
EXAMPLE OF CHRYSOTILE  
FIBER EMBEDDED  
IN TALC PARTICLE



EXAMPLE OF LARGEST  
CHRYSOTILE PARTICLES  
ENCOUNTERED IN  
COMMERCIAL TALCS

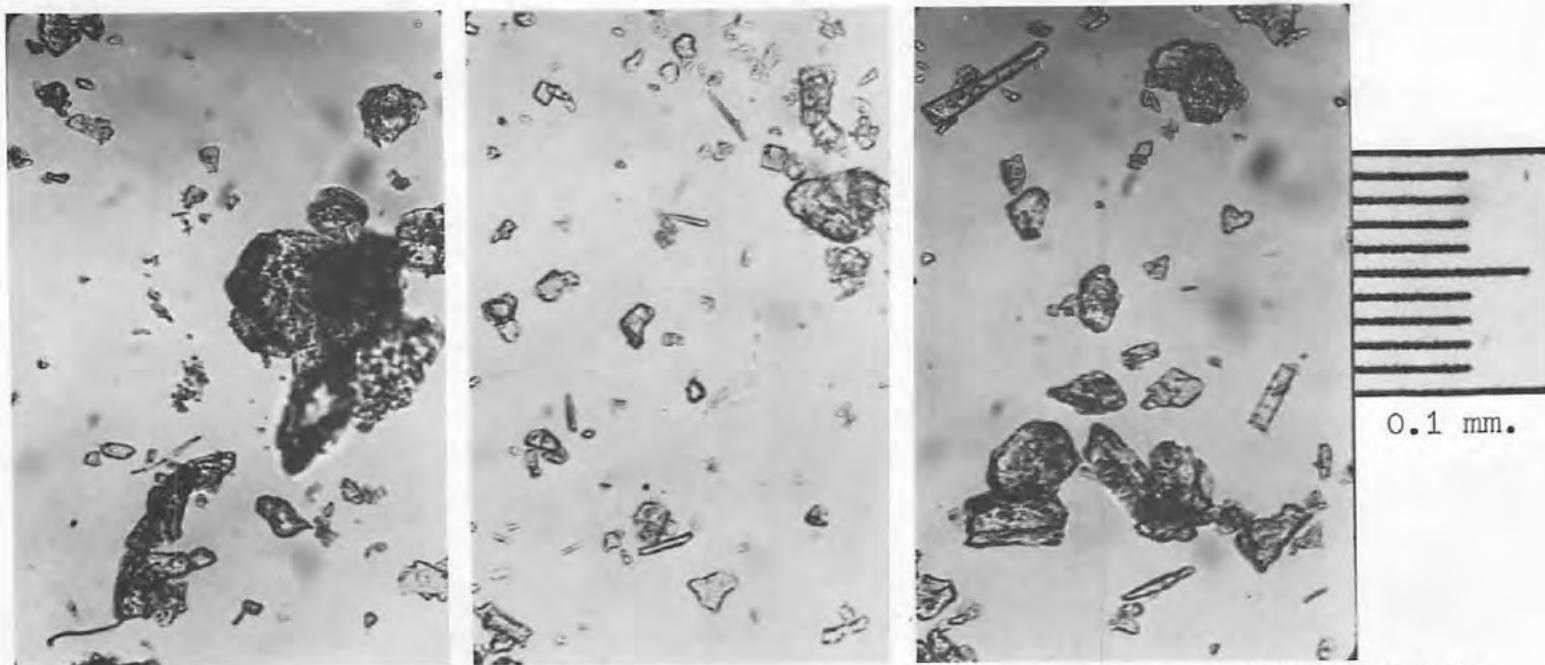
SAMPLE NO. 136.

X-RAY DIFFRACTION PATTERN



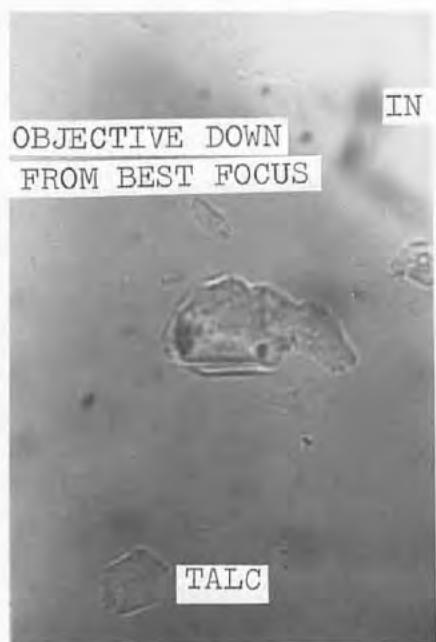
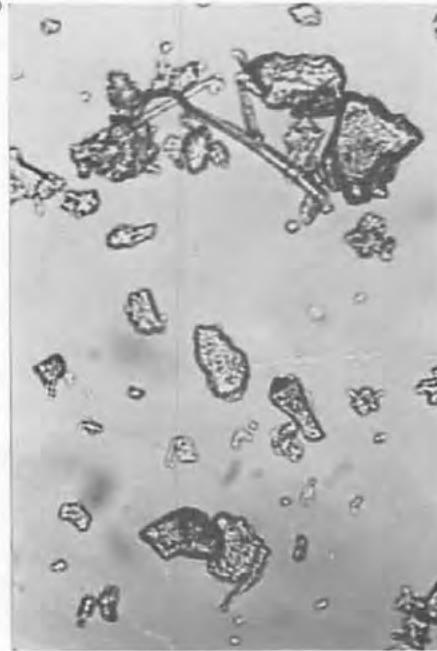
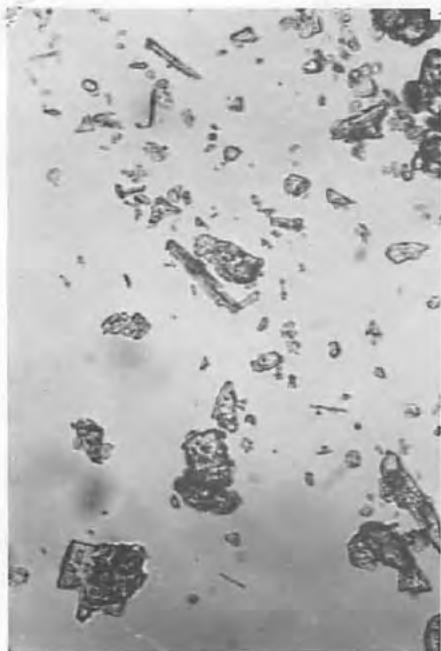
Analytical Results: TALC 87%; CHLORITE 4%; PHLOGOPITE 3%;  
α-QUARTZ 2%; DOLOMITE 2%; CHRYSOTILE 2%

PHOTOMICROGRAPHS OF DRY POWDER NO. 136

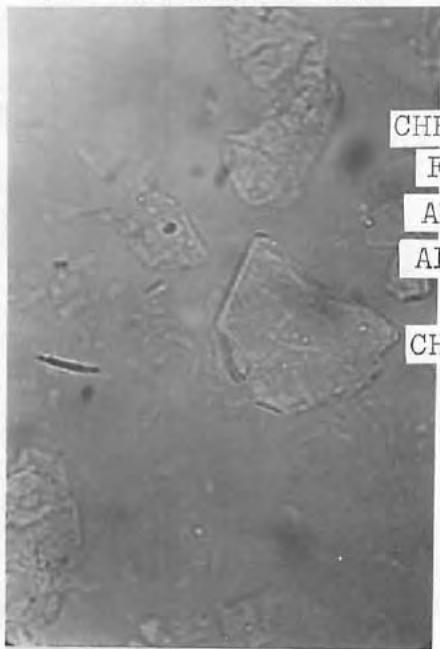
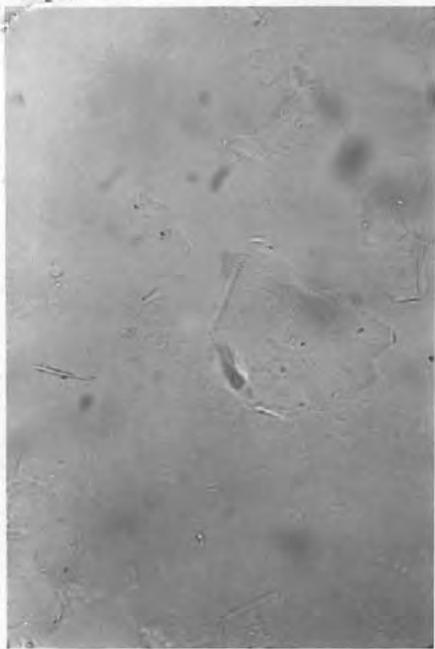


DRY POWDER, SAMPLE NO. 136

157973

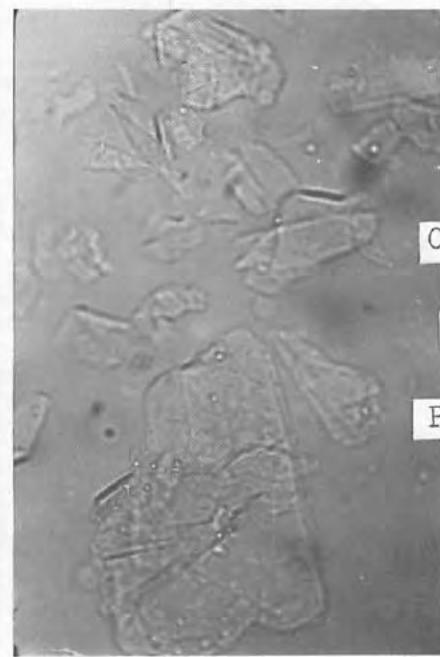
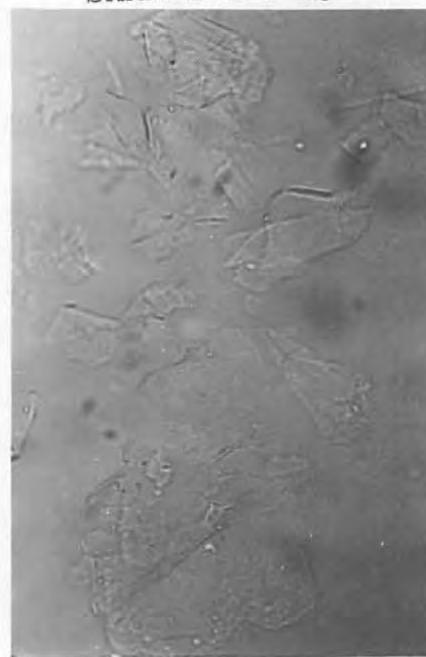
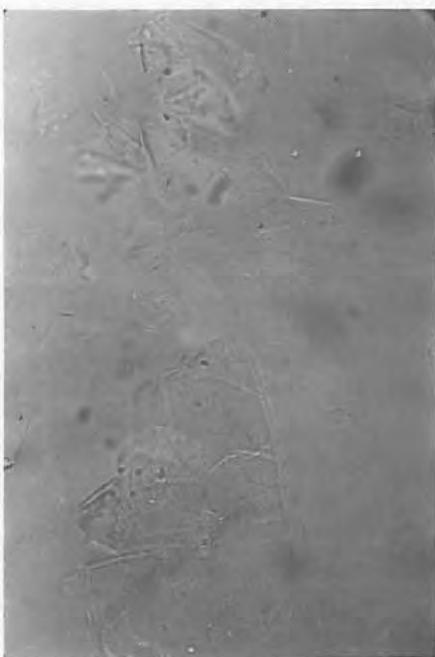


157974

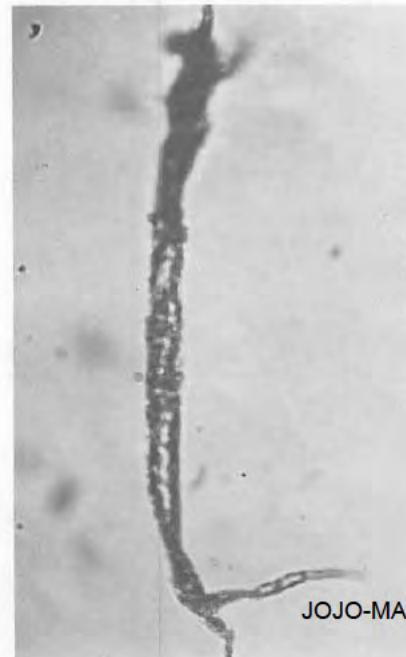


CHRYSTILE  
FIBERS  
AND TALC  
ALTERING  
TO  
CHLORITE

SAMPLE NO. 136



CHRYSTILE  
FIBERS  
WITHIN  
TALC  
PARTICLES



ORGANIC  
FIBER

JOJO-MA2546-00143

## Transmission Electron Microscope

Thos. Hutchinson, Univ. of Minn.

Particle settling in a swirl tube was used for obtaining the dispersion of "tale" on 200 mesh microscope grids. Lewin and Shower to shower were collected.

### Lewin

Roughly 900 grid squares were scanned in the T.E.M. at moderate magnification. Five fibrous particles were found which gave electron diffraction patterns unmistakably crysotile asbestos. One highly suspect particle gave an noncrysotile diffraction pattern. The particles were generally ~~one~~ less than 30 microns in length and had the typical fiber structure. No bundle branch and join was however seen.

### Shower to Shower.

~~Shower~~ Approximately 2100 grid squares were examined. Numerous examples of fibrous structures were seen. Electron diffraction of these fibers showed no resemblance to crysotile asbestos patterns. Three clear examples were found of sorprendre material and which gave perfect crysotile patterns.



Two long fibers were found singly and two others were in the same grid square and apparently in close association with a talc structure. These fibers showed clear <sup>filamented</sup> ~~fibrous~~ structure at high magnification.

### Total Concentration Calculation (Shaver to Shaver)

Prints of the micrographs were cut to estimate the relative ~~area~~ area of asbestos and ~~talc~~ talc areas. One fifth of one square contained nonfibrous asbestos while approximately 1550 squares were covered with talc. This yield an area percentage of one part in 7500 or roughly one one hundredth of one percent.

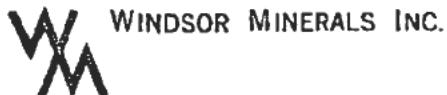
The total concentration of all "fibers" was near one percent.

Summary: Neither scanning microscopy alone or aided by X-ray energy dispersive elemental detector can unequivocally identify asbestos in concentration of a few percent. No elemental tag exists to disentangle asbestos from other fibrous minerals present. T.E.M. with electron diffraction shows less than ~~.01%~~ .01%

J.W. Hutchinson, Univ of Minnesota  
JOJO-MA2546-00146

# Exhibit 93

U.S. GOVERNMENT  
PRINTING OFFICE  
1973



WINDSOR MINERALS INC.

Windsor, Vermont

May 1, 1973

**Subject:** Memo - D. Hamer - 4/19/73  
Dispersion Staining, etc.

TO: Dr. D. R. Petterson  
Johnson & Johnson Research - W051  
U. S. Route #1  
New Brunswick, N. J. 08903

1. It is highly unlikely that the operator is seeing calcite since magnesite (var. ankerite) occurs at something like 100 times the frequency of calcite in the ore.
2. It is highly unlikely that the operator is seeing tremolite since the ore body contains actinolite in some waste areas but has never yielded tremolite in identifiable quantities.
3. The optical differences between magnesite (var. ankerite) and actinolite are substantial.
4. Chemical tests will readily differentiate the two minerals, i.e. acid solubility.

We feel that it is in everyone's best interest to develop mineralogic information on baby powder.

We question whether the very wide dissemination of such tenuous information of large potential importance is in anyone's best interest.

*R. N. Miller*  
R. N. MILLER

RNM:ab

cc: R. J. Mortimer-J&J, N.B.

EXHIBIT  
J&J-367

# Exhibit 94

Johnson & Johnson

R.H. Johnson

W.C. New Brunswick, N.J.

5/8/73

RECEIVED

Subject:

Personal

Dr. D. Peterson:

Your question this morning was how  
did Lewin assay timing relate to actinolite showings.

Baby Powder lots 108T & 109T were  
alleged to contain asbestos by Lewin. They were  
produced on April 17&18 1972. Talc shipments checked  
by microscope here showed all lots clean just prior to  
and right after that time.

The first showing of actinolite we know  
about is October 1972.

The indications are that things were in  
good shape when Lewin picked up the above two lots for  
his assays.

W.A.

# Exhibit 95

*Johnson & Johnson*

**New Brunswick, N. J.**  
April 9, 1969

**Subject:** Alternate Domestic Talc Sources  
File No. 101

Dr. G. Hildick-Smith

Pete, we have to firm up the position the Company should have on the presence of the mineral Tremolite in talc. Your staff will have to do this for us since the objections to that mineral have been mainly medical or clinical as opposed to chemical or physical.

The reason we have to firm up our position is that we have moved into high gear on some alternate talc sources and it is normal to find different levels of Tremolite in many U.S. talcs. We are looking at some of those.

Historically, in our Company, Tremolite has been bad because it has needle type crystals. Our position has been that these can stand on end, penetrate the skin, and cause irritation; consequently, talcs exceeding trace contents have never been approved. Over the past year or two, the medical literature has made reference to potential hazards of talcs containing Tremolite and I have seen some articles under the umbra of environmental health agencies from here and abroad which pinpoint severe objections to that mineral in talcum powders.

Unfortunately, Tremolite has different varieties and can be easily confused with other members of the mineral class into which it falls. Chemically, it is mainly a calcium silicate with varying amounts of magnesium silicate and sometimes it carries iron with it in minor amounts. Some varieties of it match asbestos, and I gather there has been a lot of attention given to the hazards of inhaling minerals of that type lately.

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There is nothing we can do about the confused state of affairs on Tremolite from the mineralogical and chemical points of view as far as historic literature is concerned.

The question is...How bad is Tremolite medically, and how much of it can safely be in a talc base we might develop?

*W.H.A.*  
W. H. Ashton

pm

cc: Dr. R. A. Fuller  
Dr. E. R. L. Gaughran  
Mr. R. J. Mortimer  
Dr. T. H. Shelley  
Dr. R. L. Sundberg

# Exhibit 96

Johnson & Johnson

New Brunswick, N. J.

**Subject:** ALTERNATE DOMESTIC TALC SOURCES

April 15, 1969

Project Code #101

Mr. W. H. Ashton:

Your inquiry of April 9th, 1969 addressed to Dr. G. Hildick-Smith has been referred to my attention for reply.

Over the years, I have reviewed the literature on the hazards relating to the inhalation of talc particles on several different occasions. In your memorandum, you indicate that Tremolite does have needle-type crystals and that our position has been that these could penetrate the skin and cause irritation. Actually, to the best of my knowledge, we have no factual information on this subject. It would seem logical that it could occur, although whether or not it would be of clinical significance would be conjectural.

We have been concerned to a much greater extent with regard to possible dangers relative to the inhalation of the talc with a spicule or needle-like crystalline structure as compared with the flat, platelet-type of crystalline structure. There are reports in the literature concerning talcosis which, as you know, is a form of pneumoconiosis attributed to the inhalation of talc. Reported studies have suggested that this does not occur in connection with the flat, platelet-type of talc, but does occur in connection with the spicule-type of crystalline structure characteristic of Tremolite. The reported instances have been extremely few but have, without exception, involved inhalations of high concentrations on an occupational basis of many years duration. Furthermore, we have occasionally received inquiries from various individuals, including General Johnson and several pediatricians, expressing concern over the possibility of the adverse effects on the lungs of babies or mothers who might inhale any substantial amounts of our talc formulations. In the past, we have replied to the effect that since our talc is essentially all of the platelet-type of crystalline structure, and is of a size which would not be likely to enter the pulmonary alveoli, we would not regard the usage of our powders as presenting any hazard. Obviously, if we do include Tremolite in more than unavoidable trace amounts, this sort of negation of such inquiries could no longer pertain.

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Mr. W. H. Ashton

April 15th, 1969

Upon various occasions we have discussed the possibility of carrying out studies on animals which might provide factual information with regard to whether or not variable exposures to talc suspended in the environmental atmosphere might be productive of fibrotic and/or inflammatory reactions in lungs. For a variety of reasons, these have never been carried out here.

Since pulmonary diseases, including inflammatory, fibroplastic, and neoplastic types, appear to be on the increase, it would seem to be prudent to limit any possible content of Tremolite in our powder formulations to an absolute minimum. To the best of my knowledge, we have never been faced with any litigation involving either skin or lung penetration by our talc formulations. Some years ago, we were faced with a more or less serious problem resulting from what we consider to have been an unjust accusation of danger due to the presence of a small amount of boric acid in our talc. This created such a furor that we were more or less compelled to remove boric acid from the formulation. It is conceivable that a similar situation might eventually arise if it became known that our talc formulations contained any significant amount of Tremolite. Since the usage of these products is so widespread, and the existence of pulmonary disease is increasing, it is not inconceivable that we could become involved in litigation in which pulmonary fibrosis or other changes might be rightfully or wrongfully attributed to inhalation of our powder formulations. It might be that someone in the Law Department should be consulted with regard to the defensibility of our position in the event that such a situation could ever arise.

It is my personal feeling that until we have at least substantial evidence, based on animal work, to the effect that the presence of Tremolite in our talc does not produce adverse effects, we should not extend its usage beyond an absolute minimum previously mentioned.

  
T. M. Thompson, M.D.

TMT:JAG

cc: Dr. R. A. Fuller  
Dr. Gavin Hildick-Smith  
Mr. W. J. Ryan  
Dr. G. H. Lord  
Dr. J. E. Willson  
Dr. J. Bothwell

# Exhibit 97

Dr. C. Cooper  
Univ. of Calif.

F  
July 30, 1971

**CONVERSATION WITH DR. CLARK COOPER**  
**SCHOOL OF PUBLIC HEALTH**  
**UNIVERSITY OF CALIFORNIA**

**Dr. R. A. Fuller:**

At Dr. Cralley's suggestion, a conversation was held with Dr. Clark Cooper of the School of Public Health, University of California, Berkeley. Dr. Cooper had worked at the National Center for Urban and Industrial Health and later moved to the School of Public Health in Berkeley. Dr. Cooper was Chairman of the National Research Council Review of Asbestos and Its Potential Health Hazards which published an excellent review on the subject. Dr. Cooper was called in the hope that he might be able to attend the F.D.A. meeting on August 3.

Dr. Cooper is well versed in the literature of the asbestos field, is familiar with all those doing research in it and apart from his position in the School of Public Health, runs a consulting company called, Tabershaw-Cooper Associates at 2180 Milvia Street, Berkeley, California. He is in a position to oversee epidemiological studies, conduct analytical studies on talc and allied materials, and conduct animal studies on appropriate materials. He would be pleased to discuss this area at any time. In asking Dr. Cooper his thoughts concerning the asbestos content of talc and the use of talcs for cosmetics, he indicated that in his opinion there is no place for asbestos in cosmetic talcs and would withdraw from the market any talcs that contained asbestos. He did not believe that there was a low level of asbestos content in talc which would be acceptable for cosmetic use.

Like many other researchers in the field of asbestos, Dr. Cooper appeared most cooperative and knowledgeable and could be of assistance to us as a consultant.

**R E C E I V E D**

/jm

cc: Dr. G. H. Lord  
Dr. W. Nashed  
Dr. T. H. Shelley  
Mr. J. C. Walcott

AUG 2 1971

W. NASHED  
JOHNSON & JOHNSON